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THE YEARBOOK OF  
THE UNIVERSITIES OF THE EMPIRE

SECOND CONGRESS OF THE UNIVERSITIES  
OF THE EMPIRE, 1921.

REPORT OF PROCEEDINGS, INCLUDING  
ADDRESSES, PAPERS, AND DISCUSSIONS.

(See page 9 of this Volume.)

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# THE YEARBOOK OF THE UNIVERSITIES OF THE EMPIRE

1923

EDITED BY W. H. DAWSON AND  
PUBLISHED FOR THE  
UNIVERSITIES BUREAU OF  
THE BRITISH EMPIRE



LONDON  
G. BELL AND SONS, LTD.

1923



## PREFACE

THE Calendars of the 66 Universities of the British Empire occupy several yards of shelf in the Library of the Universities Bureau. Much of their contents is of strictly local interest. In the *Yearbook* an attempt is made to extract from each of these bulky volumes such information as is likely to prove of interest to members of other Universities and Colleges, to Government Departments, Clubs, schoolmasters, and the public generally. It would be impossible to present a conspectus of this kind in a volume of manageable dimensions without resorting to the use of abbreviations and other devices for saving space. It is hoped that abbreviation has not been pressed beyond the limits of intelligibility.

In chapters introductory to the sections dealing with the Universities of Great Britain and Ireland, of Canada, of Australia, of South Africa, and of India, is collected such information regarding their history, regulations, and practice as they share in common. Each section comprises three parts:

(1) A directory of the officers and members of the staff of the University. Much trouble has been taken in preparing these directories to ascertain the sources of the various degrees held by teachers, since such information gives in a small space the educational history of their holders. If no name of a university follows a degree, it may be assumed that the degree was conferred by the university upon whose staff the teacher is serving.

With the exception of honours conferred by H.M. the King, titles other than degrees are omitted, unless they throw light upon the standing of their holders in the subjects which they profess. It is, for example, of interest to learn that a medical teacher of a university overseas holds diplomas of the Royal Colleges, whereas the addition of the letters M.R.C.S., L.R.C.P., to the name of a teacher in the United Kingdom who is also M.D. cannot be said to convey information of importance.

(2) Under the heading "General Information," an account is given of the equipment in libraries, museums, laboratories, etc., of the university, the degrees, diplomas, and certificates which it confers, its composition fees, scholarships open to graduates, residential accommodation, extra-mural work, publications, etc.

(3) The accounts of the universities which hold good with modifications from one issue to another are followed by reports of events of outstanding interest which occurred during the past academic year. They include statistics of the numbers of students in attendance and degrees conferred. These annual reports will be of great importance to future historians of the universities.

Appendices may be classified as (*a*) Summaries of regulations for the diplomas of the Medical Colleges and other Associations and Institutions of the United Kingdom, and the conditions governing admission to various professions and careers for which university studies are a fitting preparation ; (*b*) lists of inter-university scholarships and fellowships, and grants for research ; (*c*) brief accounts of universities in foreign countries, and statistics of colonial and foreign students attending the universities of the United Kingdom ; (*d*) a statement of the subjects in which the several universities of the United Kingdom may be said to specialize.

In the present issue appear for the first time accounts of the new University of Delhi ; the West Indian Agricultural College ; University College, Colombo ; King Edward VII. College of Medicine, Singapore ; and, in the appendices, several newly formed professional associations.



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## THE UNIVERSITIES BUREAU OF THE EMPIRE

At the final, Delegates', meeting of the Congress of 1912 it was resolved that steps be taken for the formation in London of a Bureau of Information for the Universities of the Empire. From its inception until November 1919 the Bureau was, by the great courtesy of the Director, allowed the use of a room in the Imperial Institute. In the spring of 1919 the Government offered a non-recurrent grant of £5000 to enable the Committee to secure and furnish premises suitable for the wide activities which the Bureau had developed, on condition that the Universities of the Empire undertook to provide funds adequate to its maintenance. The Committee thereupon purchased the lease of No. 50 Russell Square. Offices in this building have been let to—

THE BRITISH DIVISION OF THE AMERICAN UNIVERSITY UNION.  
*Director*—GEORGE MACLEAN, M.A., B.D., Ph.D., Hon. LL.D.

THE OFFICE NATIONAL DES UNIVERSITÉS ET ÉCOLES FRANÇAISES.  
*Director*—A. PHILIBERT, L. ès L., L. en D.

THE ANGLO-DANISH BUREAU, ESTABLISHED BY THE DANISH STUDENTS' INTERNATIONAL COMMITTEE. *Director*—J. H. HELWEG, Cand. Mag.

## COMMITTEE

*(Appointed in accordance with a resolution of the Delegates to the Congress of the Universities of the Empire, at a Meeting in London on July 5, 1912)*

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*Secretary:* ALEX HILL, M.A., M.D., F.R.C.S.

# UNIVERSITIES OF GREAT BRITAIN AND IRELAND

## INTRODUCTORY

HISTORICAL SUMMARY—ADMISSION AS AN UNDERGRADUATE—ADMISSION OF STUDENTS FROM ABROAD—NUMBER OF FULL-TIME STUDENTS—TERMS—FEES—CONFERENCES—STANDING COMMITTEE OF VICE-CHANCELLORS—CONGRESS OF 1921—INTERNATIONAL CONFERENCES—CONFERENCE OF BRITISH AND SWISS UNIVERSITIES, 1922—ANGLO-AMERICAN CONFERENCES—INTERCHANGE OF TEACHERS AND STUDENTS—UNIVERSITY GRANTS—REPRESENTATIVES IN PARLIAMENT.

UNIVERSITIES were the outcome of the great intellectual revival which affected Europe in the twelfth and thirteenth centuries. Shortly after the Schools of Bologna and Paris had developed into what we now term Universities, similar seats of learning arose at Oxford and Cambridge, the nucleus of organization being, as at Paris, a corporation of masters—not, as at Bologna, a corporation of students—and many of the students being boys of fourteen or even younger. Instruction was in the form of lectures by licensed teachers. To the Seven Liberal Arts of the mediæval schools (the “trivium”—GRAMMAR, LOGIC, and RHETORIC, and the “quadrivium”—ARITHMETIC, GEOMETRY, MUSIC, and ASTRONOMY) the Universities added the three higher “Faculties” of THEOLOGY, LAW, and MEDICINE in order to provide complete preparation for the learned professions. The Scottish Universities, except Edinburgh, were founded in the fifteenth century, but the country had not been greatly influenced by the Revival of Learning, and although the earliest Reformers were in touch with continental scholars, and some attempts were made to introduce the New Learning into the schools and universities, the mediæval scholastic tradition remained paramount in St. Andrews and Glasgow until the seventeenth century. Aberdeen was more receptive to *renaissance* influences. The University of Edinburgh originated in a College established by the Town Council in 1583. Trinity College, Dublin, was founded by Queen Elizabeth in 1591 on the lines of the Oxford and Cambridge colleges.

After the Reformation a demand arose in England for education of a more secular type, but the Acts of Uniformity (1559 and 1662) and similar measures stereotyped the schools and universities as clerical and theological institutions, and by the latter half of the eighteenth

century the teaching in the Universities had become mainly traditional and formal, and they were rapidly losing their hold on the national life.

Readjustment to modern conditions took place in the course of the nineteenth century. Already in 1779 Protestant Dissenters, and in 1791 Roman Catholics, had been emancipated from the ban against their following the teaching profession, and the few Denominational tests retained by the older Universities until 1871 were then abolished. Oxford in 1800 established a system of written examinations for the bachelorship, and Cambridge in 1824 the classical Tripos. Soon afterwards both Universities instituted non-classical Honour examinations. The University Commissioners of 1850 and 1877 made provision at Oxford and Cambridge for the endowment of the teaching of modern subjects and the throwing open of scholarships to students of such subjects, removed practically all obligations to take orders in the Church of England, and did much to make the Universities accessible to all classes of the community.

Meanwhile the foundation in 1828 on a strictly undenominational basis of what has now become University College, London, provided a teaching institution of University rank free from all restriction of tests. The University of Durham obtained its charter in 1837. In its original conception it followed closely the lines of Oxford. It was partly endowed out of the funds of the See and Chapter of Durham. The Colleges in which the other English Universities originated were founded as follows: Owens College, Manchester, 1851; Yorkshire College, Leeds, 1874; University College, Bristol, 1876; Firth College, Sheffield, 1879; Mason College, Birmingham, 1880; University College, Liverpool, 1881. Created to minister to local needs and supported largely by local benefactions, they were naturally closely associated with local industries and from the first laid stress upon the study of mathematical, scientific, and modern subjects. The Royal College of Science and the Royal School of Mines originated in a Technical School formed in 1851 in connexion with a Museum of Practical Geology. They, together with the City and Guilds (Engineering) College, founded in 1881, became integral parts of the Imperial College of Science and Technology which was established in 1907 with the declared purpose of giving the highest specialized instruction and providing for research in the various branches of science, especially in its applications to industry. A University of Wales was projected early in the fifteenth century and the project was revived in Cromwell's time, but it did not materialize until 1893. The constituent colleges at Aberystwyth, Cardiff, and Bangor were founded in 1872, 1883, and 1884 respectively. They are thoroughly indigenous to the Principality, much of the funds having been collected in very small sums from workpeople at the doors of churches and chapels. The two modern Irish Universities both date from 1909. In 1850 a Royal Charter was granted to the then recently established Queen's Colleges of Belfast, Cork, and Galway, constituting them a Federal University which was absorbed in 1880 in the Royal University. University College, Dublin, representing the Catholic University established by the Irish Bishops



in 1854, became with the Cork and Galway Colleges in 1909 constituents of the National University of Ireland, while Queen's College, Belfast, became the Queen's University of Belfast.

WOMEN were first admitted to Degrees by the University of London in 1878. Bedford College had already been founded in 1849; the three other colleges for women in connexion with the University of London were founded, Westfield in 1882, Holloway in 1886, and King's in 1902. Of the Cambridge colleges Girton originated at Hitchin in 1869, and was removed to the near neighbourhood of Cambridge in 1873; Newnham was founded in 1880. The colleges at Oxford were opened, Lady Margaret in 1878, Somerville in 1879, St. Hugh's in 1886, and St. Hilda's in 1893. Cambridge admitted women informally to Tripos examinations in 1872 and adopted, October 1921, a proposal that it should take power to confer on them by diploma Titles of Degrees. Oxford admitted them to examinations in 1884 and to degrees and full membership in 1920. Women have been admitted to the Universities of Scotland since 1892, to Trinity College, Dublin, since 1904, and to all the modern Universities from their foundation.

Unlike those of most other countries, the Univs. of the United Kingdom have been, since their origin, independent of State control. Another distinguishing characteristic of British Univs., as compared with those of the Continent of Europe, has from the earliest days been the provision of halls of residence, or COLLEGES, in which students live as members of a community, with the privileges of social intercourse and subject to the mutual influence which corporate life exerts.

ADMISSION AS AN UNDERGRADUATE. Before inserting a student's name in *matricula* all Univs. exact evidence that the applicant's intellectual equipment fits him to undertake a course of study for a degree.

*Matriculation examinations* covering the usual subjects of education in a secondary school are held by the Univs. of Durham, London, Wales, Belfast, Dublin, Ireland (N.U.I.), and the Joint Board of Manchester, Liverpool, Leeds, Sheffield, and Birmingham. Analogous examns. are held by Oxford ("Responsions"), Cambridge ("Previous Examn."), and the Scottish Univs. Entrance Board ("Preliminary Examn."), and these must be passed (or exemption on the ground of having passed equivalent examns. must be obtained) by all students proceeding to degrees, though not necessarily before entering upon courses of study in the Univs. Many of the Oxford and Cambridge Colleges make the passing of Responsions or the Previous or equivalent examns. a condition of admission to the College. Bristol has discontinued its matricn. examn. as superfluous in view of the institution of the School Certificate and Higher Certif. examns. (v. *infra*), and the admission to them, as required by the Board of Education, of candidates not presented by schools.

At all the Univs. English, Mathematics, and at least *one* language other than English are compulsory, except that Oxford, the Joint Board, and Bristol allow a branch of Natural Science to be taken instead of or in addition to Maths., the Durham Colleges allow a choice between

English and Greek Testament, and between Maths. and Logic, and at Oxford English is not a compulsory subject.

Cambridge, Dublin, Durham (except Armstrong College), Oxford, Birmingham (for Arts students), and the National Univ. of Ireland (for Medical, including Dental, students) all require *two* languages other than English, namely: in the case of Cambridge—(a) or (b) and one other of the following, (a) Greek, (b) Latin, (c) French, (d) German, (e) Italian, (f) Spanish; Birmingham—Latin and a modern language; Dublin—Latin and one of (a), (c), (d), (e), (f), Irish, or Russian; Durham—Latin and one of (a), (c), (d); Oxford—2 of (a), (b), (c), (d), including either Latin or Greek; N.U.I.—Latin and, if the candidate is exempted from the necessity of presenting Irish, any prescribed modern language.

Greek or Latin, though not compulsory at the London matricn. examn., is so at the Intern. examn. in *Arts* of this Univ. Greek or Latin is likewise compulsory for Arts students at Liverpool,\* Armstrong Coll., and the N.U.I. (Arts, Philos., or Celtic studies); Latin for Arts students at Leeds, Manchester, Sheffield, and the Scottish Univs., and in most qualifying schemes for the Wales B.A. degree, for *Law* students at Manchester, Sheffield, Wales, and the N.U.I., and for Medical students at Manchester. Irish is compulsory at the N.U.I. for all students, except those born outside Ireland or whose home residence has been outside Ireland for 3 yrs. immediately preceding matricn. At Oxford and Cambridge Arabic, Sanskrit, Chinese, Pali, or, at Oxford, Persian or French, may under certain conditions be offered by natives of Asia or Africa not of European parentage in lieu of Latin or (Oxford) Greek; at Durham oriental medical students may offer Sanskrit in lieu of Latin; and in Scotland any approved classical language may be substituted for Greek or Latin by students whose native language is other than European. All candidates for admission to Scottish Univs. whose native language is other than English, who have not passed in English at the Intermediate or Final examn. for a degree in Arts, will be required to pass a special test in English including an oral examn.

In other subjects a considerable latitude of choice is allowed: the Joint Board for 5 English Univs., for instance, while requiring candidates to pass in English Composition and Literature, English History, and Mathematics, allow a choice of any three of the following, one of which must be a language—Greek, Latin, French, German, some other approved language, Mechanics or Physics, Chemistry, Geography, Natural History or Botany, General Experimental Science.

*A Matriculation Examination for persons of mature years* has been instituted by the above-mentioned Joint Board (v. App. XXI.), and Belfast.

*School Examinations.—England.* In 1918 there came into operation a scheme originated by the Board of Education in consultation with all the Univs. of England for co-ordinating Secondary School examns. Under this scheme the following are recognized by the Board as approved—

\* Except those holding the Secondary Educn. Certif. of the Egyptian Ministry of Educn. with an exemption from the Matricn. Examn.

I. As "First Examinations," suitable for pupils about the age of 16, the standard being such that a Pass with Credit in the three main groups of School subjects (English subjects, Foreign Languages, Mathematics and Science) would entitle a candidate to admission to a Univ.;—The "School Certificate" examns. of the Oxford and Cambridge Schools Examn. Board, of the Oxford Delegacy of Local Examns. and the Cambridge Local Examns. Syndicate (formerly known as "Senior Local" examns.), of the Univs. of Bristol and Durham, and of the Northern (Birm., Leeds, Liv., Manc., Sheff.) Univs. Joint Matricn. Board; "The General School" examn. of London; and the School Certificate examn. of the Central Welsh Board.

II. As "Second Examinations," suitable for pupils about 2 years older, framed on the assumption that the candidate has, after the stage marked by the first examn., followed a more specialized course;—The "Higher Certificate" examns. of the Oxford and Cambridge Schools Examns. Board, Bristol, Durham, the Northern Univs. Joint Board, London, Oxford (Delegacy for Local Examns.), Cambridge (Syndicate for Local Examns.), and the Central Welsh Board.

With a view to securing equality of standard and the acceptance of the certificates by Univs. and Professional Bodies, the Board of Education exercises a co-ordinating authority with the help of a "Secondary School Examinations Council" composed of 19 representatives of the Examining Bodies, County Councils Assocn., Assocn. of Municipal Corporations, Assocn. of Education Committees, and Teachers' Registration Council. Provision is made for ensuring that teachers in the Schools are brought into touch with the Examining Bodies (supplied in all cases by the Univs.); that a School is examined, if it so desires, on its own syllabus, unless the Examining Body considers it inadequate; and that estimates of the merits of their candidates in each of the subjects offered by them if submitted by Head Masters and Head Mistresses are taken into account in the award of certificates.

Schools are not required as a condition of recognition for grants to take these examns., but Schools on the grant list entering pupils for them under conditions approved by the Board receive an additional grant in respect of each pupil so entered. Schools are warned against determining their organization or curriculum exclusively or principally with reference to the requirements of any examn. The arrangement of organization or curriculum for the purpose of preparing any pupils or Form for any examn. not approved by the Board is expressly forbidden.

Among the functions of the Secondary School Examns. Council is negotiation with Univs. and Professional Bodies for the acceptance of the examn. certificates as exempting the holders from certain other examns. They are now accepted, subject to various qualifications, by all English Univs. and by a number of professional bodies (v. Appendices), as exempting from entrance examns. The "Second Examinations" are also recognized by many Univs. for exemption from Intermediate Exams. and for admission to Honours courses, etc.

*Wales.* The School and Higher Certificate examns. of the Central

Welsh Board are accepted, subject for subject, as affording a test of fitness for matricn. equivalent to the Univ.'s matricn. examn., so also, subject for subject, are the Ox. and Camb. Schools Examn. Board's School (Pass with Credit) and Higher Certif., the Scotch Educn. Dept.'s Leaving Certif. (Higher Grade) and the Intermediate Educn. Board of Ireland's Senior Grade Certif.

*Scotland.* On December 31, 1918, there came into operation Ordinance No. 70 (General No. 3) of the University Courts of the four Scottish Univs. as to Admission for purposes of graduation. This defines the normal test of fitness as "the production of evidence duly attested by a competent authority of the satisfactory completion of a suitable course of secondary education," and sets up an Entrance Board to regulate the application of this principle. This Board, which has superseded the Joint Board of Examiners for the Scottish Univs., will provide by "General Regulations" for the recognition of Group Certifs. of the Scotch Education Dept. and, in the case of Schools in Scotland not regularly presenting candidates for these certifs., other evidence of completion of suitable courses. It will similarly provide for the recognition of Leaving or other certifs., in the case of applicants from outside Scotland. The admission of applicants who, owing to exceptional circumstances, have not been able to fulfil the normal conditions will be provided for by "Special" Regns. In the meanwhile, the Preliminary Examn. Regns. of the Joint Board are continued (vide p. 220).

*Ireland.* The Senior Grade examn. of the Intermediate Education Board of Ireland is accepted, subject for subject, in lieu of the matricn. examns. of Dublin, Nat. Univ. of Ireland, and (subject to special conditions in respect of Maths.) Belfast. Belfast and the N.U.I. also accept, subject for subject, the Scottish Leaving Certif. (Higher or Hons.), the Higher Certif. of the Ox. and Camb. Schools Examn. Board, and (Belfast only) the Bristol School Certif. For admission to the Univ. of Dublin the Senior Lecturer is now allowed to recognize examns. as "equivalent" to the Senior Grade Intermediate, and does so recognize the Scottish Leaving Certificate and others.

ADMISSION OF STUDENTS FROM THE KING'S DOMINIONS OVERSEAS AND FROM FOREIGN COUNTRIES. Certificates which would qualify for admission to Univs. outside the United Kingdom are accepted as satisfying, in whole or in part, the matricn. requirements of the Univs. of the United Kingdom. Intending students should apply for information to the Registrar of the Univ. in which they desire to be matriculated. A summary of existing regulations is given in Appendix XXIII.

The NUMBER OF FULL-TIME STUDENTS in Universities and University Colleges in receipt of Treasury Grant is given in the Returns published by the University Grants Committee for the year 1920-21 as 40,130, including 10,893 women. The returns do not include the students of Oxford, Cambridge, Trinity College, Dublin, the colleges at Durlam, Guy's Hospital Medical School and some other schools of the University of London, and University College, Exeter. If the figures for these

institutions are added a total of 55,000 is obtained—larger, by 2400, than the total for 1919-20. The total may be distributed as follows: Oxford and Cambridge (including 1400 women), 11,100; London, 10,900; North Midlands (Birmingham, Leeds, Liverpool, Manchester, and Sheffield Universities, the Manchester College of Technology and University College, Nottingham), 10,000; the rest of England, 3900; Wales, 2850; Scotland, 11,750; Ireland, 4500. The Grants Committee classify the 40,130 full-time students included in their tables: Medicine, including Dentistry, 13,377, of whom 3069 were women; Arts, Theology, Law, Music, Commerce, Economics, and Education, 12,591 (5921 women); Pure Science, 6237 (1720 women); Engineering, Applied Chemistry, etc., 7925 (183 women). The above statistics do not include the students of the institutions other than Universities and University Colleges in which professional education of university grade is given in Theology, Teaching, Agriculture, Mining, etc.; nor students reading privately for the external degrees of the University of London, for the Bar, etc. Another consideration which makes difficult comparison with statistics of other countries is that the work of the higher forms of many of our secondary and "public" schools corresponds with the earlier stages of the work done in Colleges and collegiate departments of Universities elsewhere, *e.g.* in America. In the United States of America in 1920 there were 334,000 men and 188,000 women in 670 universities, colleges, and professional schools. In many of these institutions the enrolment of part-time students constitutes a very large proportion of the total.

NATIONAL UNION OF STUDENTS of England and Wales. Vide Appendix XXV.

TERMS. The academic year is divided into three terms, which run from about Oct. 1 to the middle of Dec.; middle of Jan. to end of March; middle of April to end of first week in July.

FEES are charged at all of the Universities. They vary somewhat in the different Univs., but are, on the average, for Arts £30, for Science £36, for Engineering or for Medicine £30 to £60 per annum in English Univs. In Scottish, Welsh, and Irish Univs. the fees are lower.

CONFERENCES. In May 1917 representatives of the Universities and University Colleges met in Conference to devise measures for the further encouragement of Post-graduate Study and Research. It was resolved that it was desirable that a degree should be instituted carrying the title of Doctor, obtainable by graduates of British and foreign Univs. after a course of advanced study and research. The conditions and regulations for such a degree were further considered at adjourned meetings held on May 10, 1918, Jan. 24, 1919, and March 14, 1919. The resulting legislation is summarized on p. 15.

Amongst other matters considered by Conferences during the past five years have been included Interchange of Teachers and Students, the Tenure of University Offices, Superannuation and Provision of Pensions.

In May 1918 Mr. Balfour summoned at the Foreign Office a Conference of representatives of all the Universities for the purpose of

putting before them a proposal that on the invitation of the Govt. of the U.S. a Universities' Mission should be sent to America. At this meeting Mr. Balfour took the opportunity of pressing upon the Univs. the desirability of establishing a representative body to which matters of interest to the Univs. might be referred by Govt. Departments. He urged the necessity of the creation of "an organ of expression" which would voice the desires and aspirations of the British Univs. and represent them in their relations with the Univs. of other nations. At a subsequent meeting Conference resolved that "it is desirable in the interests of the Univs. and of the nation that steps be taken to promote co-operation and mutual consultation among the Univs. of Great Britain and Ireland, and, further, that the Vice-Chancellor or Principal of each Univ. or a deputy appointed by him, together with the Executive Committee of the Universities' Bureau, be appointed a Standing Committee to consider any matters of common interest arising out of the proceedings of this Conference or submitted to it by the Govt. and to report from time to time to the Conference."

The Standing Committee of Vice-Chancellors has dealt with such matters as the presentation of the case for Increased Grants to Univs. and Univ. Colleges, leading to the Deputation to the President of the Board of Education and the Chancellor of the Exchequer which was received in Nov. 1918; the relations of the Univs. and Univ. Colleges to national schemes for the Promotion of Research; the question of controlling the number of students in professional and other subjects; the Recognition of the Special Army Education Certif., as qualifying for matriculation; Fees for Courses of Undergraduate and for Post-graduate Study and the possibility of adopting a uniform scale in each of the several Faculties of all Univs. of the U.K.; the relations of the Univs. to Training Colleges for Teachers; qualification for admission to courses leading to the Ph.D. degree; recognition of foreign school-leaving certificates as qualifying for matriculation; salaries of teachers; recognition of records of students from Australia, Canada and S. Africa.

PROCEEDINGS OF THE STANDING COMMITTEE OF VICE-CHANCELLORS AND PRINCIPALS IN 1922. Amongst the more important matters dealt with were: Agenda for the Annual Conference of Univs.; effect upon University expenditure of the Safeguarding of Industries Act; delay in securing, and increased cost of foreign publications due to the German Reparation (Recovery) Act; exchange of journals and other publications with countries suffering from a depreciated currency; co-ordination of pension schemes of the U.K. and of the King's Dominions overseas; relations of British Universities with those of Central Europe; the teaching of Spanish; French teachers in England and English teachers in France; American correspondence "degrees"; specialization in certain subjects of study by certain Universities\*; the mutual recognition of Matriculation exams. and Degree courses of study; the group system in the Higher School Certificate Examination.

At the ANNUAL CONFERENCE of the Univs. of Great Britain and

\* Vide Appendix XXVII.

Ireland held on May 13, 1922, the subjects discussed were: (1) the urgent need for the provision of enlarged opportunities for advanced study and research in the British Univs.; (2) the increase of residential accommodation for undergraduate and other students; (3) \*specialization in certain subjects of study by certain Univs.; (4) the organization of Adult Education as an integral part of the work of the Univs. The President of the Board of Education, Rt. Hon. H. A. L. Fisher, was present, and took part in the discussion of subject (3). An abridged report of the proceedings was printed. Copies are obtainable from the Universities Bureau, 50 Russell Square, Price 1s.

The SECOND CONGRESS of the Univs. of the Empire met in Oxford on July 5 to 8, 1921. All members received, and upwards of 300 accepted offers of hospitality, either from a College or from a resident member of the Univ., for the four days during which Congress was to sit. Including members of the Univ. of Oxford, who attended without enrolment, and those who returned to London and other places for the night, the attendance numbered about 550. The 18 Home Univs. and 36 of the Univs. overseas were represented, the visitors from overseas numbering 100. Subjects discussed: "The Universities and the Balance of Studies," Chairman, the Marquess Curzon of Kedleston, Chancellor of the Univ. of Oxford; "The Universities and the Teaching of Civics, Politics, and Social Economics," and "The Universities and Secondary Education," Chairman, Mr. A. J. Balfour, Chancellor of the Univ. of Cambridge and of the Univ. of Edinburgh; "The Universities and Adult Education," Chairman, Viscount Haldane, Chancellor of the University of Bristol; "The Universities and Technological Education," Chairman, the Marquess of Crewe, Chancellor of the Univ. of Sheffield; "The Universities and Training for Commerce, Industry, and Administration" and "The Universities and the Training of School Teachers," Chairman, Dr. J. C. Irvine, Principal, in the place of the late Lord Balfour of Burleigh, Chancellor of the Univ. of St. Andrews; "University Finance," Chairman, Sir Robert Stout, Chancellor of the Univ. of New Zealand; "The Universities and Research," Chairman, Lord Robert Cecil, Chancellor of the Univ. of Birmingham; "Interchange of Teachers and Students," Chairman, Lord Kenyon, Pro-Chancellor of the Univ. of Wales.

*Report of the Proceedings of the Congress*, G. Bell & Son, London, pp. 452 and liv, price £1: 1s.

INTERNATIONAL CONFERENCES. Following the Mission to America already referred to, the British Univs. in May 1919 accepted an invitation to appoint a delegation to visit the Univs. of France as guests of the French Republic. In the autumn of 1919 a similar invitation was accepted from the Belgian Govt.

CONFERENCE OF BRITISH AND SWISS UNIVERSITIES, 1922. Vide Appendix XXVI.

CONFERENCES OF BRITISH AND AMERICAN UNIVERSITY TEACHERS, organized by the University of London. In July 1920, 17 Professors of

\* Vide Appendix XXVII.

English, and in July 1921, 32 Professors of History, from many parts of the U.S.A. and the British Dominions overseas, met their colleagues of the Universities of the U.K. in conference in London to discuss methods of research and teaching and to elaborate plans of co-operation. The Conference of 1921 synchronized with the opening of the University of London Institute of Historical Research. A *Standing Committee* was established to give effect to the Resolutions of this Conference, to act as a permanent link between British and other historians, and to arrange for future meetings.

INTERCHANGE OF TEACHERS AND STUDENTS between the Univs. of the King's Dominions overseas and of foreign countries and the Univs. of the U.K. In May 1919 a Committee was established for the purpose of promoting interchange. This Committee was discharged in March 1922 and replaced by another consisting of the Interchange Correspondents of the Bureau in the various Univs.

PARLIAMENTARY GRANTS TO UNIVS. AND UNIV. COLLEGES. Prior to 1889 the English Univs. and Univ. Colls. were dependent for their incomes upon endowments, subscriptions and students' fees. In that year a Treasury Grant of £15,000 p.a. was made to the English Univ. Colls. and the College at Dundee. At the same date each of the three Welsh Univ. Colls. was receiving £4000 p.a., and the Scotch Univs. a statutable grant of £42,000 to which was added in 1892 under the Education and Local Taxation Account (Scotland) Act an annual subsidy of £30,000. Between 1826 and 1895 sums amounting to £380,000 were contributed by Government towards the cost of enlarging the buildings of the Scottish Univs. In Ireland the Queen's Colleges of Belfast, Cork and Galway were established in 1845, the three buildings costing a total of £100,000. Each College received a Government Grant of £7000 p.a. The Queen's Univ. was established in 1850, as an examining body. Its annual subsidy, varying with the estimates, never exceeded £5000. In 1879 the Queen's Univ. was replaced by the Royal Univ., also an examining body, but differing from the Queen's Univ. in that students other than those of the Queen's Colls. were admitted to its exams. It also gave fellowships, scholarships and prizes. Until 1883, when, in accordance with the Act of Parliament by which it was established, it obtained its income of £20,000 p.a. out of funds released by the disestablishment of the Church of Ireland, its expenses were met in the same way as in the case of the Queen's Univ.

In 1896 two Commissioners were appointed by the Treasury to inspect the equipment and report upon the work of the 12 Univ. Colls. in England and at Dundee participating in the Grant (£15,000 p.a.) of 1889 and 2 which were claimants for Grants. In recognition of their increased activities and of additional support received from rates and private benefactions the total Grant was increased to £25,000 p.a. In their Report on the Univ. of Birmingham (into which the Mason College had been transformed in 1900), the 11 other Univ. Colls. to which Grants had been assigned, and 3 claimants the two Commissioners appointed in 1901 submitted evidence of growth qualifying for increased financial aid; but owing to the South African War no



action, with the exception of the addition of the Univ. Colls. of Reading and Southampton to the list, each receiving £1000, was taken by the Treasury until 1905, when the total Grant was increased to £100,000. In Jan. 1906 a Permanent Committee was appointed by the Treasury "to advise the Department as to the distribution of the Grant in aid of Colleges furnishing Education of a Univ. Standard." The Committee forthwith proceeded to appoint two inspectors to report upon the 14 Univ. Colls. receiving grants and 3 claimants. By this time, in addition to Birmingham, Leeds, Liverpool, Manchester and Sheffield possessed Univs. to each of which £2000 p.a. had been granted towards the cost of exams. and the giving of degrees. The Univ. of London also received £8000 p.a.

In 1909-10 the Grant to the English Univ. Colls. and the College at Dundee was raised to £150,000. In 1907 a Treasury Committee was appointed "to inquire and report upon the University of Wales and its constituent Colleges." (The present Secretary to the Bureau was one of the two Commissioners in 1901 and again in 1906 and a member of this Committee.) Following the issue of the Committee's Report in 1909 the Grant to the 3 Welsh Colleges was increased to £25,000. In 1919 the Advisory Committee was dissolved and the Univ. Grants Committee appointed "to inquire into the financial needs of Univ. Education in the United Kingdom and to advise the Government as to the application of any Grants that may be made by Parliament towards meeting them." The total Grant was increased to £1,000,000. Including Emergency Grants to Cambridge, Oxford, and Trinity College, Dublin, the sums assigned in 1920-21 were, Annual Grants £909,240 (including Ireland £111,000), Non-recurrent Grants £304,000 (including Ireland £67,000). The total Grant for 1921-22 was £1,500,000, and in addition a sum of £500,000 was provided to assist the Institutions to provide retrospective superannuation benefit for their staffs; the estimate for 1922-23 for Great Britain only is £1,169,000.

EDUCATIONAL GRANTS TO EX-SERVICE OFFICERS AND MEN studying in Universities and other institutions for higher education. The number of such students in receipt of Grants under the scheme administered by the Board of Education was in Oct. 1922 about 4500. The estimated total cost of the scheme is 8½ millions for 27,000 students.

REPRESENTATIVES IN PARLIAMENT. Oxford (2), Cambridge (2), London, Wales, Scottish (3), Dublin, National of Ireland, Belfast—v. the sections relating to these Univs.

Birmingham, Bristol, Durham, Leeds, Liverpool, Manchester, Sheffield—Rt. Hon. H. A. L. FISHER, M.A.; Sir MARTIN CONWAY, M.A.

## THE VARIOUS DEGREES CONFERRED BY THE UNIVERSITIES

THE older Universities have developed out of the Univs. of the Middle Ages under the compulsion of internal forces, with very little influence

from outside. The historical continuity of their evolution and their individual independence account for certain customs and usages in which they differ one from another and from Univs. in other lands. Their titles of degrees afford an illustration of this. A Univ. of the Middle Ages was a Guild of learned men. Teaching was the craft of the Guild, whose fellowship carried with it the right to teach. An admitted aspirant for fellowship was termed a bachelor. The members of the Guild recognized his apprenticeship after submitting him to certain tests or, as we should term them, exams. After gaining some experience in teaching, and successfully maintaining a thesis in public disputation, the bachelor attained to his degree. Admitted into the Guild, with its *jus ubique docendi*, he was known indifferently as doctor, master or professor. Still following this ancient usage, the degree in Scotland is the mastership, M.A. In Oxford, Cambridge and Dublin, where the examn. for the bachelorship grew to be the determining test, the mastership, which carries with it all the privileges of membership of the Guild, or Senate, follows without further examn. after an interval of two or three years, but in no case less than six years from matricn. For convenience in standardizing the attainments of their alumni, modern Univs. have divided the degree into stages—usually described as the “first” and “higher” degrees—Bachelorship, Mastership and Doctorate. The conferment of a first degree now marks the satisfactory completion of a three or four years’ Univ. course.

At Oxford, Cambridge, Dublin, and in the Scottish Univs. the Faculty of Arts is not subdivided. Except in Scotland, where the mastership (M.A.) takes the place of the bachelorship, B.A. is the “first degree,” whether the course leading to it be literary or scientific. In Trinity College, Dublin, it is necessary to secure the B.A. before proceeding to any other degree (except in music). In Scotland, as alternatives to the M.A., the student may take as his “first degree” the B.Sc., pure or applied (the standard being that of M.A. with Honours), the B.L., or the B.Com. At St. Andrews the B.Phil. or the B.Litt. may be taken either conjointly with, or after, the M.A. At Cambridge there is no B.Sc. At Oxford there are special degrees, B.Litt. and B.Sc. (v. *infra*).

At all other Univs. a course in Arts leads to the B.A., in Science to the B.Sc., in Commerce to the B.Com., and similarly to other titles in other departments of knowledge.

Each of the Faculties of Theology, Law, Medicine, and Music has its own bachelor’s degree.

The signatures of the titles of degrees vary. In the following list the more usual signature is placed first :

*Bachelor of Arts* : B.A.

*Bachelor of Science* : B.Sc., Sc.B. Dub.

*Bachelor of Science in its various applications* : B.Sc. (Engineering), B.Eng. Liv., Sheff.; B.A.I. Dub.; B.Sc. (Metallurgy), B.Met. Sheff.; B.Sc. (Mining), B.Sc. (Mining Engineering) Glas.; B.Sc. Tech.; B.Sc. (Applied Chemistry); B.Sc. (Naval Architecture); B.Sc. (Veterinary Science), B.V.Sc. Liv.; B.Sc. Agr., Agr.B. Dub., B.Agr.Sc. N.U.I.; B.Sc.

(Forestry), Agr.B. (Forestry) Dub. ; B.Sc. (Horticulture) ; B.Sc. (Estate Management) ; B.Sc. (Economics) ; B.Sc. (Public Health), B.Hy. Durh. ; B.Sc. (Pharmacy).

*Bachelor of Commerce* : B.Com., B.Comm. N.U.I., B.Com.Sc. Belf.

*Bachelor of Architecture* : B.Arch.

*Bachelor of Dental Science* : B.D.S., B.Ch.D. Leeds, B.Dent.Sc. Dub.

*Bachelor of Education* : B.Ed. (of the Scottish Univs., two years after a first degree).

In Theology the title of the first degree is B.D. In Law it is LL.B., B.C.L. Ox. Durh., B.L. or (open only to graduates in Arts) LL.B. the Scottish Univs. In Medicine the signature of the title is M.B., B.M. Ox. ; in Surgery, Ch.B., B.Ch. Camb. Dub. Ox. Wales, B.S. Durh. Lond. ; in Obstetrics, B.A.O. Dub. N.U.I. In Music, Mus.B., B.Mus. Ox. Durh. Wales.

### *Honours Degrees*

In all Univs. of the United Kingdom the first degree in Arts (or Science, if a separate faculty) may be obtained as an ordinary degree, or with Honours.

At Oxford the Honours Schools (B.A.) are in Literæ Humaniores, Mathematics, Natural Science (including Engineering), Jurisprudence, Modern History, Theology, Oriental Studies, English Language and Literature, Modern European Languages, and Philos., Politics and Economics.

At Cambridge (Triposes), in Anthropology, Classics, Economics, English, Geography, History, Law (B.A. and LL.B.), Mathematics, Mechanical Science, Modern and Mediæval Languages, Oriental Languages, Moral Science, Natural Science, Theology.

In Scotland (M.A.), in Celtic, Classics, Economic Science, English, (Aberdeen, Geography), History, Latin and English, French, Italian, or Celtic, Mathematics and Natural Philosophy, Mental Philosophy, Modern Languages, (St. Andrews, Natural Science), Sanskrit, Semitic Languages.

At Dublin (Moderatorships), in Mathematics, Classics, Mental and Moral Philosophy, Experimental Science, Natural Science, History and Political Science, Modern Literature, Legal and Political Science, Engineering Science, Celtic Languages, Oriental Languages.

At London, B.A. Hons. may be taken in Classics, Latin, Greek, Mathematics, Archæology, English, French, German, Celtic, Italian, Spanish, Portuguese, Dutch, Russian, Polish, Czech and Slovak, Serbo-Croat and Slovene, Classical Sanskrit and Pali, Arabic, Persian, Hebrew and Aramaic (including Syriac), Chinese, Philosophy, Psychology, History, Sociology, Geography ; B.Sc. Hons., Mathematics, Astronomy, Physics, Chemistry, Geology, Botany, Zoology, Physiology, Human Anatomy and Morphology, Psychology, Anthropology, Statistics ; B.Sc. Hons. (Economics) ; B.Sc. Hons. (Engineering) ; B.Sc. Hons. (Mining) ; B.Sc. Hons. (Metallurgy) ; B.D. Hons. ; LL.B. Hons. ; M.B., B.S. Hons. ; B.D.S. Hons.

In other Univs. Honours are obtainable in a variety of the subjects named above.

*Recognition of Study at other Universities*

**UNDERGRADUATES.** The Univs. of Bristol and Leeds accept attendance for 1 yr. at any Univ. requiring residence as a qualification for a degree. At London any person who has passed the external Intermediate examn. before registering as an Internal student may take the Final Examn. after a 2 yrs.' course and qualify for a degree in the subsequent year. At Oxford members of certain Affiliated Colleges of the United Kingdom, and of certain approved home, colonial, and Indian Univs., who have attended lectures for at least 2 yrs. and attained a prescribed standard, are allowed to count the first term kept by residence as their fourth term. At Cambridge a similar privilege is allowed to students of "Affiliated Institutions." At Dublin students who have spent 2 yrs. in Arts studies at certain Univs. (see list on p. 266) and have passed the examns. belonging to that period are given credit for the first academic year. At Durham a similar concession is made to students of science. In the Scottish and certain other Univs. attendance at lectures and examns. passed in other Univs. may be recognized by the Board of Studies, or Senate, after consideration of each case.

**GRADUATES.** The remission to graduates of any other Univ. (or of an approved Univ.) of 2 yrs. of the 4 yrs.' course is made by the Univ. of Dublin, of 1 yr. of the 3 yrs.' course by the Scottish Univs. and by the Univs. of Bristol, London, and the N.U.I. At Oxford graduates of a home Univ. and others, being over the age of twenty-one, who can satisfy the Education Committee that they have received a good general education, are eligible to apply for admission to an approved course of special study and research for the degree of B.Litt. or B.Sc., and, if successful, may supplicate for the degree after completing 2 yrs. of residence. At Cambridge graduates suitably qualified are admitted as Research students and may, after the satisfactory completion of a 2 yrs.' course and the submission of a dissertation, obtain the degree of M.Litt. or M.Sc. At Dublin a graduate of any approved Univ. who possesses a degree the equivalent of Moderatorship may, after 1 yr. of advanced study and research, present himself for examn. for the degree of Sc.B. Certain Univs. which have not adopted ordinances to that intent are prepared to consider applications from graduates of other Univs. who desire to read for higher degrees for remission of standing or exemption from examinations.

*Higher Degrees*

**M.A.** At Cambridge a Bachelor of Arts may, without further examn., proceed to the M.A. at the close of the 6th yr. after the end of his first term; at Oxford in the twenty-first term after matriculation; at Dublin 3 yrs. after passing the B.A. examn. At Durham and Sheffield graduates in Honours (Durham--1st or 2nd class) of 3 yrs.' and 1 yr.'s standing respectively are admitted to the Mastership without

further examn. ; other graduates must pass the M.A. examn. Other Univs. exact a further period of study from their own graduates, followed by the presentation of a thesis, or an examn., or both, of 1 yr. at Birmingham, Leeds, Sheffield, and the N.U.I. ; of 1 yr. from graduates with Honours, and 2 yrs. from others, at Bristol, Manchester, and Wales ; of two years from all graduates at Liverpool and London. Graduates of approved Univs. can obtain the Mastership after 1 yr. of advanced study and research at Birm., Belf., and the N.U.I. ; after 2 yrs. at Bris., Leeds, Liv., Lond., Manc., Sheff., Wales. At London a thesis is required from Internal students in all branches, except Mathematics in which it is optional, and an examn. For External students the thesis is optional in all branches. At Liverpool and Manchester persons who have not graduated can obtain the M.A. degree after a course of advanced study and research extending, usually, over 3 years.

*M.Sc.* This degree is not conferred by Oxford, Dublin, or the Scottish Univs. At other Univs. it can be obtained by graduates of the Univ. under conditions similar to those for the M.A. At Durham, by graduates, B.Sc., of 2 yrs.' (Sheffield 1 yr.'s) standing who took first or second class Honours, without further test. At Leeds, by graduates, B.Sc., in Honours of 1 yr.'s standing without further test. At Liverpool, by graduates, B.Sc., with Honours, after 1 yr.'s higher study (thesis required). At London, by Internal students of 1 yr.'s or 2 yrs.', by External students of 1 yr.'s standing from B.Sc. with thesis (optional in Mathematics) and examn. At Manchester, by graduates, B.Sc., of 1 yr.'s standing after thesis and examn. (at the discretion of the Faculty). At Cambridge the degree is conferred upon Research students (*v. supra*). In other Univs. which confer the degree, graduates of approved Univs. can obtain the M.Sc. on terms similar to those for the M.A.

Other titles of Mastership conferred by various Univs.—M.Litt., M.Com., LL.M., M.Mus., M.A.O., M.Ch., Ch.M., M.Ch.Orth., M.D.S., M.V.Sc., M.H. (Hygiene), M.Eng., M.Sc.Tech., M.Met., M.Arch., M.Ed.

*Ph.D.* All the Univs. of the United Kingdom now confer the degree of Philosophiæ Doctor. Candidates entering upon a course of advanced study and research with a view to this degree must be at least 21 (Oxford—22, Brist., Liv., and Dub.—no minimum age) ; must ordinarily be graduates either of the Univ. or of some other approved Univ. ; must have pursued their studies at a Univ. or Univs. for a period of at least 3 yrs. (Oxford—4, London—2, Dublin—not specified) ; must produce evidence of fitness for the proposed course of study and research. The course for the degree extends over 3 yrs., except in special cases in which, on the ground of the candidate's previous training and attainments, it may be reduced to 2. At its termination the student must submit a dissertation and may be required to qualify also by examn. The degree is granted in any faculty in which the Univ. is prepared to receive advanced students.

A candidate for the degree of Ph.D., as an External student of the Univ. of London, must have graduated in the Faculty of Theology, Arts, Science, or Economics in this University not less than 2 academic yrs. previously.

*Litt.D. and Sc.D.* The Doctorate in Letters and in Science is conferred upon Masters of Arts and Masters of Science (Dublin, Bachelors or Masters) distinguished by their contributions to the advancement of learning or science. The claim to the degree must be based either upon a special thesis, as at London, or upon published works. In certain Univs. the Faculty may require the applicant to appear for examn. An applicant for the Doctorate must be of 3 yrs.' standing from graduation at Dublin, N.U.I. (for D.Sc. Pub. Health); 4 yrs.' at Manchester, London (for D.Sc. and External D.Lit.); 5 yrs.' at Birmingham, Sheffield, N.U.I. (for D.Litt., D.Litt. Celt., D.Sc.), and the Scottish Univs.; 6 yrs.' at Belfast, Durham (for D.Sc.), Leeds, Liverpool (5 yrs. from M.A. or, for D.Sc., from M.Sc. or Ph.D.), Bristol, Cambridge; 7 yrs.' at Oxford, London (for Internal D.Lit.); 10 yrs.', Univ. of Wales, Durham (for Litt.D.).

Graduates of other Univs. who have been admitted to the degree of M.A. or M.Sc. (Oxford M.A., B.Sc., or B.Litt.; Dub. B.A.) can proceed to the Litt.D. or Sc.D. under the prescribed regulations. In Scotland Honours graduates of approved Univs. of 5 yrs.' standing who have spent the equivalent (4 terms) of two winter sessions in research at a Scottish Univ., have submitted a satisfactory thesis or published work, and have, if required, passed an examn., are admitted to the Doctorate. At Bristol the degree of D.Sc. can be obtained without previous admission to the M.Sc. At London and Manchester a candidate for the Doctorate may be specially exempted from the examn. for M.A. or M.Sc.

*D.Hy.* (Durh.) 2 yrs. from B.Hy.; examn., thesis.

### *Degrees in Divinity*

*B.D.* is conferred after examn. in the Scottish Univs. and the Univs. of Durham, London, Manchester, and Wales; after examn. and submission of a thesis at Dublin; after examn. and the submission of a dissertation and published works at Cambridge (examn. may be omitted) and at Oxford. At London the course must extend over 3 yrs., subsequent to matriculation. In Scotland a candidate must be M.A. of a Scottish Univ. who has taken a theological course in a specially recognized institution, or a graduate of an approved Univ. who has taken a complete theological course of at least 2 yrs. in the Univ. conferring the degree; at Dublin, a B.A. of 3 yrs.' standing; at Durham, a man of 25 yrs. of age, who is either a graduate of 2 yrs.' standing or the holder of the Diploma in Theology; in Wales, a graduate who, subsequent to graduation, has studied for 3 yrs. at one of the Associated Theol. Colls. of the Univ.; at Cambridge, a candidate must be M.A. or LL.M.; at Oxford, a candidate must be a M.A. or must be 26 yrs. of age, have followed a course of study in Christian Theology extending over 6 terms, and resided at the Univ. during 6 terms.

*D.D.* In Scotland the degree is conferred *honoris causa tantum*. At London it is conferred upon B.D.'s who took Honours in at least

one subject, on presentation of a dissertation, followed by an examn., if the examiners so desire. At other Univs. it is conferred in consideration of published works, or a dissertation (and, at Oxford, a *viva voce* examn., if the judges so desire). The requisite standing is, at Cambridge and London, 5 yrs. from B.D.; Dublin, 8 yrs. from B.A.; Durham, 10 yrs. from B.A.; Manchester, 4 yrs. from B.D. (or 6 yrs. for B.D.'s of other Univs. who have studied for 2 yrs. at Manchester); Oxford, 14 yrs. from matricn., or, if he was admitted to the degree of B.D. as a graduate of another Univ., the candidate must have attained the age of 33; Wales, 6 yrs. from B.D.

### *Degrees in Medicine and Surgery*

*M.B., Ch.B.* The regulations for these degrees are practically uniform. A Preliminary examination satisfying the requirements of the General Medical Council—*i.e.* Matriculation, Responsions, Previous, or Scottish Preliminary. Registration as a medical student by the G.M.C. (see Appendix XII.) is recommended. Satisfactory attendance during at least 5 yrs. at courses of study and hospital practice. Four examns. (in some Univs. grouped as three or two). All examns. must be passed at the Univ. granting the degree, with the exception of the first, in Chemistry, Physics, and Biology, from which a candidate may be exempted if he has passed an equivalent examn. at the Univ., or elsewhere (Scottish Univs., Birmingham, Bristol, Dublin for S. African students only, Durham, London, Oxford Senior Students, Sheffield). Study in the Univ. for at least 3 yrs., except for the degrees as an External student of the Univ. of London, who must study for 1 yr. in a Univ. of the United Kingdom; or for 2 yrs., Scottish Univs., Leeds, Liverpool, Manchester; for 1 yr. College of Medicine, Newcastle-on-Tyne (Durham). The Univs. of Oxford and Cambridge exact 3 yrs.' residence, but allow students to do any or all of their medical work at other recognized medical schools. At Oxford, Dublin, Univ. of Wales, candidates must graduate B.A. (or B.Sc., Wales) before admission to a medical degree.

*M.D.* Candidates must be M.B., Ch.B. of, usually, 2 yrs.' standing (Oxford, 10 yrs. from matriculation; Cambridge, M.B. of 3 yrs.', or M.A. of 4 yrs.' standing; Dublin, of M.A. standing; N.U.I., M.B. of 3 yrs.' standing). A dissertation is compulsory in almost all Univs., followed by an examn., unless the examiners pronounce the dissertation to be of such merit as to render further examn. unnecessary.

*Ch.M.* Regulations similar to those for M.D.

*D.Ch.* (Durh.). Candidate must have devoted, subsequently to having obtained a registrable qualification, 3 yrs. (including one at least in the Univ. and 6 months at least abroad) to the study of Surgery and ancillary subjects.

*Degrees in Dentistry and in Veterinary Science are obtainable under somewhat similar conditions.*

*Degrees in Law*

*LL.B.* (or *B.C.L.*), obtainable with Honours or as an ordinary degree. In the Scottish Univs. candidates must have graduated *M.A.*; at Dublin, Durham (*B.C.L.*), National University of Ireland, *B.A.* At Durham candidates must be of 4 yrs.' standing from *B.A.* In Wales the course extends over 4 yrs., the first year being spent on an intermediate course in Arts. At Belfast graduates of this or of some other Univ. are eligible for the degree after a 1 yr.'s course in Law; at Oxford, after a 2 yrs.' course, if they obtain Honours in the *B.C.L.* examination. At Sheffield a graduate of a Univ. of the United Kingdom who has attended for 1 yr. the intermediate course and for 1 yr. the Final course in Law and for 2 yrs. studied in a recognized institution, may be a candidate for the degree. In the majority of Univs. there are two examns., Intermediate and Final.

*LL.M.* Cambridge, Leeds, Liverpool, Manchester, Sheffield. By standing for graduates in Law with Honours, except at Leeds and Manc., where a dissertation must be presented. For others, after examn. or (Camb.) dissertation. Liverpool requires 2 yrs. of approved study.

*LL.D.* (or *D.C.L.*). By the Scottish Univs. the Doctorate is awarded only *honoris causa tantum*. Other Univs., unless the degree be awarded *honoris causa*, require the submission of a thesis, dissertation, or published works, and may require attendance at an examn.; in Dublin a candidate may elect to undergo examn. in lieu of offering a thesis, etc. The requisite standing for the Doctorate is, at London, 2 yrs. from Honours *LL.B.*; Dublin, 3 yrs. from *B.A.*; Manchester, 4 yrs. from *LL.B.*; National Univ. of Ireland and Sheffield, 5 yrs. from *LL.B.*; Oxford (*D.C.L.*), 5 yrs. from *B.C.L.*; Cambridge and Liverpool, 5 yrs. from *LL.M.*; Leeds, 6 yrs. from *LL.B.*; Durham (*D.C.L.*) and Wales, 10 yrs. from graduation.

\* *Degrees in Music*

The degrees of *Mus.B.* (or *B.Mus.*) and *Mus.D.* (or *D.Mus.*) are conferred by the Univs. of Cambridge, Dublin, Durham, Edinburgh, London, Manchester, Oxford, and Wales; *B.Mus.* and *M.Mus.* Birmingham; *Mus.M.* Cambridge and *M.Mus.* Wales.

*Mus.B.* At Birmingham, Cambridge, Dublin, Edinburgh, London, Manchester, and Wales, students must pass the same Entrance examn. (Matriculation, Previous, or Preliminary) as students in Arts; with, at Birmingham, where the degree is an Honours degree, an examn. in theory and in execution. At Durham they are admitted on a *testamur* as Students of Music. At Oxford they must pass either Responsions or the Preliminary for Students of Music, in which, if two of the three languages, French, German, Italian, are taken, neither Greek nor Latin is obligatory. In Wales a student must attend an intermediate class in Arts or Science in addition to the Music course. Residence is not



obligatory at Dublin, Durham, or Oxford. At Edinburgh students must study Music in the Univ. for one whole winter session. As a rule, the course extends over 3 yrs. with two, or three, examns., including an exercise for the Final examn.

*Mus.M.* Conferred 3 yrs. after the Mus.B. for original work and dissertation (Birmingham), after examn. and exercise (Cambridge, Wales).

*Mus.D.* Conferred at Cambridge on graduates not less than 30 yrs. of age, in recognition of distinction as Composer; in Wales (D.Mus.) on B.Mus. of 10 yrs.' or M.Mus. of 3 yrs.' standing on consideration of original compositions; at Edinburgh on Mus.B.'s of 3 yrs.' standing, after examn. as Composer, Executant, or Theorist or Historian (Dissertation), and also *honoris causa tantum*; at Dublin on Mus.B.'s after further examn. or practical test; at London on Mus.B.'s of 2 yrs.' standing, Oxford 3 yrs.', Manchester 4 yrs.', Durham and N.U.I. 5 yrs.', after exercise and examn.

# UNIVERSITY OF BIRMINGHAM

VISITOR—H.M. THE KING.

CHANCELLOR—Rt. Hon. Lord ROBERT CECIL, M.A., D.C.L., LL.D.,  
K.C., M.P.

VICE-CHANCELLOR—Sir GILBERT BARLING, BART., C.B., C.B.E.,  
F.R.C.S.

PRO-VICE-CHANCELLOR—JOHN HENRY LLOYD, M.A., J.P.

TREASURER—HUGH MORTON, J.P.

PRINCIPAL—C. GRANT ROBERTSON, C.V.O., M.A. Oxford.

VICE-PRINCIPAL—Sir WILLIAM ASHLEY, Ph.D., M.Com., M.A.

SECRETARY—GEO. H. MORLEY, M.Com.

REGISTRAR—JOHN H. COSTAIN.

LIBRARIAN—E. H. F. MILLS, M.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Accounting*

Martineau, C. E., M.A. Camb.,  
M.Com., F.C.A. Prof.  
Hughes, C. L., A.C.A. Lectr.

### *Agriculture, v. Zool.*

### *Anatomy, Human, and Anthro- pology*

Brash, J. C., M.A., M.B., Ch.B.,  
B.Sc. Prof.  
Haslam, W. F., M.B., Ch.B.,  
F.R.C.S. Lectr.  
Raison, C. A., M.B., Ch.B. Lectr.  
Rose, Baron T., B.Sc., M.B.,  
Ch.M., F.R.C.S.E.  
Hon. Demr.  
Shufflebotham, Miss H. N., B.Sc.,  
M.B. Demr.  
Gemmill, W., M.A., F.R.C.S.  
Hon. Demr.

### *Botany*

[Mason Prof.  
Yapp, R. H., M.Sc., M.A. Camb.,  
Elliott, Jessie S., B.Sc. Lond.,  
D.Sc. Lectr.  
Leach, W., B.Sc. Manc.  
Asst. Lectr.

### *Brewing*

Ling, A. R., M.Sc., F.I.C. Prof.  
Nanji, D. R., M.Sc., A.I.C. Asst.

### *Chemistry*

[Mason Prof.  
Morgan, Gilbert T., O.B.E., D.Sc.  
Lond., A.R.C.S., F.I.C., F.R.S.  
Carter, S. R., M.Sc., A.I.C.  
(Sr. Lectr. in Physical C.)  
Goddard, A. E., M.Sc., A.I.C.  
Jr. Lectr.  
Jones, Eveline, B.Sc. Jr. Lectr.  
Nicholas, S. D., B.A. Ox., A.I.C.  
Lectr.  
Wardlaw, W., D.Sc. Durh., A.I.C.  
Lectr.  
Wood, C. E., M.Sc., A.I.C. Lectr.  
Cooper, E. Ashley, D.Sc. (Lond.),  
F.I.C.  
Lectr. in Pub. Health C.

### Jr. Lectrs. :

Pinkard, F. W., B.Sc. Wales., A.I.C.  
Glover, T. J., M.Sc. N.U.I.  
Drew, H. D. K., Ph.D., M.Sc.

*Classics*

Thomson, J. Oliver, O.B.E., M.A.  
Aberd. B.A. Camb. (Latin)

Prof.

Hirst, Margaret E., M.A.

Asst. Lectr.

Chambers, C. D., M.A. Ox. (Greek)

Reader.

Barrett, A. J., M.A. Ox. (Latin)

Asst. Lectr.

*Commerce, v. also Acc.*

Ashley, Sir Wm., M.A. Ox.,  
M.Com., Ph.D. Berl. Prof.

Smith, J. G., M.A. Dub. Asst. Prof.

Whale, P. B., B.Sc.Econ. Lond.

Lectr.

*Commercial Law*

Tillyard, F., M.A. Ox., M.Com.,

Barr.-at-Law Prof.

*Dentistry, v. also Metall.*

Matthews, G. F. C., L.D.S.

(Orthod.) Lectr.

*Dental Anat. and Physiol.*

Humphreys, H. F., M.B., Ch.B.,

M.D.S., L.D.S. Lectr.

*Dental Histol., etc.*

[Lectr.

Wellings, A. W., M.D.S., L.D.S.

*Dental Mechanics*

Donegan, A. E., M.A. Camb.,

L.D.S. Lectr.

*Dental Surgery, etc.*

[Lectr.

Madin, W. T., B.D.S., L.D.S.

*Education*

Valentine, C. W., M.A. Camb.,

D.Phil. St. And. Prof.

Ritchie, Frances, B.Sc.

Asst. Lectr.

*Heads of Training Depts. :*

Braddock, A. P., M.A., B.Sc.

Lond.

Hammond, Marjorie, B.A.

Gill, Conrad, M.A. Leeds, B.A.

Camb., Senr. Tutor, Con-

tinuation Training Dept.

*Lectrs. :*

Chapman, A. E., M.A. Camb.

Scott, Elizabeth, B.A. Belf.

*Asst. Lectrs. (v. also History) :*

Ritchie, Frances M., B.Sc.

Asst. Lectr. in Secondary Dept.

Buchanan, Freda M., M.A. Edin.

Hippisley-Barnes, Hilda A., B.Sc.

Lond.

Chester, K. E., M.A. Ox.

Jebb, Eglantyne M., M.A. Ox.

Poulton, Ethel M., M.Sc.

Simpson, Lilian E., B.A.

*Engineering, Civil* [Beale Prof.

Lea, F. C., O.B.E., D.Sc. Lond.,

M.Sc., A.M.I.C.E., A.R.C.S.

Panton, R. C., M.Sc., M.A., B.A.I.

Dub. Lectr.

Veal, T. H. P., B.Sc., A.M.I.C.E.

Lectr.

Coultas, H. W., B.Sc. Leeds

Asst. Lectr. & Demr.

Haywood, W., F.R.I.B.A. (Town

Planning) Lectr.

*Engineering, Electrical*

Cramp, W., D.Sc. Manc., M.Sc.

Tech., M.I.E.E. Prof.

Kipps, E. J., M.Sc., M.I.E.E.

Lectr.

Vickers, H., M.Eng. Liv. Lectr.

Harvey, G. M., B.Eng. Liv.,

A.M.I.E.E. Lectr.

Randall, O. R., B.Sc. Lond.

Lectr.

*Engineering, Mechanical*

Burstall, F. W., M.Sc., M.A.

Camb., M.I.C.E., M.I.M.E.

Chance Prof.

Porter, R. C., M.Sc. Vict.,

A.M.I.C.E. Lectr.

Boden, F. H., B.Sc. (Machine

Design) Lectr.

Baker, H., M.Sc. (Machine Design)

Assist. Lectr.

Ellis, S. J., B.Sc. Demr.

*English*

de Sélincourt, E., M.A., D.Litt.

Ox. Prof.

Maitland-Smith, I. J., M.A. Aberd.  
Lectr.  
Hughes, A. D. M., M.A. Ox. Lectr.  
Milner-Barry, Alda Lectr.

*French*

Ritchie, R. L. Graeme, M.A.,  
D. de l'U. Paris, O.A. Prof.  
Milne, Jane J., M.A. Lectr.  
Battistini, P., L. ès L. Asst. Lectr.

*Geology and Mineralogy* [Prof.  
Boulton, W. S., D.Sc. Wales,  
M.Sc., A.R.C.S., F.G.S.  
Raw, F., B.Sc. Lond., F.G.S. (Spl.  
Lectr. in Petrology) Lectr.  
Wills, L. J., Ph.D., M.A. Camb.,  
F.G.S. Lectr.

*German*

Sandbach, F. E., M.A. Camb.,  
Ph.D. Strass. Prof.  
Strachan, L. R. M., M.A. Lectr.  
Liddell, M. F., M.A. Edin. Lectr.

*History*

[Prof.  
Beazley, C. R., D.Litt. Ox., M.A.  
Gill, Conrad (v. Educ.)  
Reader in Const. H.

## Jr. Lectrs. :

Sutcliffe, Dorothy, M.A. Manc.  
and Leeds  
Adams, H. P., M.A. (Ancient H.)  
Thomason, M. Beatrice, M.A. (Asst.  
Lectr. in Educn.)

*Italian*

de Castelvécchio, Linetta P.  
Serena Prof.

*Law, v. Comm.**Mathematics*

Watson, G. N., Sc.D. Camb.,  
D.Sc. Lond., F.R.S.  
Mason Prof.  
Preece, C. T., M.A. Camb. Lectr.  
Colomb, Ruby, M.A. Lond.  
Lectr.

## Asst. Lectrs. :

Calderwood, Nora I., M.A., B.Sc.  
Edin.  
Lumsden, T. A., M.A., B.Sc. Edin.

*Medicine, v. infra**Metallurgy*

[Feeney Prof.  
Turner, T., M.Sc., A.R.S.M., F.I.C.  
(Lectr. in Dental M.)  
Bamford, T. G., M.Sc. Liv. Lectr.  
Stansbie, J. H., B.Sc. Lond.  
Lectr.  
Asst. Lectrs. & Demrs. :  
Harris, H., B.Sc., F.C.S.  
Turner, T. H., M.Sc.

*Mining*

Cadman, Sir John, K.C.M.G.,  
D.Sc., Prof. of M. and Adviser  
in the Dept. of M.

*Mining, Coal, and Metal*

[Prof.  
Moss, K. N., O.B.E., M.Sc.,  
A.M.I.C.E., M.I.M.E., F.G.S.  
Rees, J. P., A.R.S.M.  
Lectr. in Metal M.  
Garrett, J. G., A.M.I.Min.E.  
Lectr. in Surveying.  
Veale, A. P., B.Sc., A.M.I.Min.E.  
Asst. Lectr. & Demr.

*Mining, Oil*

[Prof.  
Thompson, R. R., B.Sc. Durh.  
Nash, A. W., M.I.M.E., M.I.P.T.  
Lectr.

Stallard, R. J.

Demr. in Petroleum Boring.  
Haldane, J. S., LL.D., M.D.,  
F.R.S., Hon. Prof. and Dir.  
of Research Lab.  
Graham, J. I., M.A. Camb., M.Sc.  
Lond., A.R.C.Sc.I.

Asst. Dir. of Research.  
Shatwell, H. G., M.Sc. (Tech.)  
Manc. Research Worker.

*Music*

Bantock, G., M.A., D.Mus. Edin.  
R. Peyton Prof.  
Finegan, E. M. V., M.A. Liv.  
Lectr.

*Philosophy and Polit. Economy*

Moberly, W. H., M.A. Ox. Prof.  
Harvey, J. W., M.A. Ox. Lectr.

*Physics*

Smith, S. W. J., M.A. Camb.  
D.Sc. Lond., F.R.S.

Poynting Prof.

Shakespear, G. A., D.Sc., M.A.  
Camb., B.A., B.Sc. Lond. (Spl.  
Lectr. in Expl. P.) Lectr.

Barlow, G., D.Sc. Birm., Wales,  
and Lond. Lectr.

Keene, H. B., D.Sc. Lectr.

Asst. Lectrs.:

IBBS, T. L., M.C., M.Sc.

Young, J., B.Sc. Lond., A.R.C.S.

Dee, A. A., B.Sc. Lond., A.R.C.S.

Tyler, Edward, M.Sc.

*Physiology*

Carlier, E. W. W., M.Sc., M.D.  
Edin. F.R.S. Prof.

Walker, Hilda, M.B., Ch.B. Lectr.

Ligertwood, Laura M., M.B., Ch.B.  
Edin. Lectr.

*Russian*

Tillyard, H. J. W., M.A., Camb.,  
D.Litt. Edin. Prof.

*Spanish*

Conroy, R., M.A., N.U.I. Lectr.

*Zoology and Comp. Anatomy*

Gamble, F. W., D.Sc. Manc.,  
M.Sc., F.Z.S., F.R.S. (Dir.  
of Agric. Z. Research)

Mason Prof.

Newth, H. G., A.R.C.S. Lectr.

Eastham, L., B.Sc. Leeds  
Asst. Lectr.

Medicine (for subjects of first 2 yrs.  
—Anat., etc., v. *supra*).

*Bacteriology*, v. Path.

*Forensic M. & Toxicology*

Morrison, J. T. J., M.A., M.B.,  
B.C. Camb., F.R.C.S. Prof.

Walker, C., M.D., B.Sc. Asst.

*Hygiene and Public Health*, v.  
also Chem.

Robertson, J., C.M.G., O.B.E.,  
M.D., B.Sc. Prof.

Auden, G. A., M.D., M.A., B.C.,  
D.P.H. Camb., F.R.C.P.  
(Hygiene) Asst. Lectr.

*Infant Hygiene and Dis. of Children*

Parsons, L. G., M.D. Lond. (also  
Clin. Lectr.) Lectr.

*Materia Medica*

Kneale, J. C., M.B., Ch.B. Lectr.

Greenwood, F. R., M.D., B.S.  
Lond., M.B., Ch.B. Demr.

*Medicine*

Russell, J. W., M.A., M.D.,  
F.R.C.P. Prof.

Kauffmann, O. J., M.D., F.R.C.P.  
Prof.

Ball, L., M.B., B.S. Asst.

*Mental Diseases*

Hughes, P. T., M.B., Ch.M. Edin.,  
D.P.H. Lond. Lectr.

*Midwifery and Dis. of Women*

Wilson, T., Ch.M., M.D. Lond.,  
F.R.C.S. Prof.

Purslow, C. E., M.D. Lond. Lectr.

Whitehouse, Beckwith, M.S.,  
F.R.C.S. Asst.

*Ophthalmology*

Evans, J. J., M.D., F.R.C.S. Lectr.

*Pathology & Bacteriology*

Wilson, G. H., M.B. Glas. Prof.

Piney, A., M.R.C.S. Lectr.

Lewis, C. J., M.D., D.Sc. Edin.,  
F.R.C.P.E. (Board of Pub.  
Health) Spl. Lectr.

Wyatt, R. B. H., M.R.C.S.,  
L.R.C.P. Demr.

Abrahams, R. G., M.B., Ch.B.  
Asst.

Ash, T. B., M.B., Ch.B. Asst.

*Surgery*

Leedham-Green, C., M.B., Ch.M.,  
F.R.C.S. Prof.

Gamgee, L. P., F.R.C.S. Prof.

Barling, S., C.M.G., M.S., F.R.C.S.	<i>Therapeutics</i>
Asst.	Stanley, D., M.D. Birm. and Edin., F.R.C.P. Prof.
<i>Surgery, Operative</i>	
Heaton, G., M.A., M.B., B.Ch.	Adult Education
Ox., F.R.C.S.	Lectr. Tutors: J. W. Harvey (Jt.-Secy.) and 12 others.

## AFFILIATED INSTITUTIONS

MIDLAND INSTITUTE. Students are admitted to Intermediate Arts examn. as Internal students.

SALTLEY TRAINING COLLEGE. Students taking the 4-yr. course are admitted to the Intermediate Arts examn. as Internal students.

HANDSWORTH AND LICHFIELD THEOLOGICAL COLLEGES. Students can take the 2nd and 3rd yrs. for the B.A. in their own Colls.

## GENERAL INFORMATION

The Univ., a development of the Mason College founded by Sir Josiah Mason in 1880, was incorporated by Royal Charter in 1900. The Charter prescribes instruction in all branches of a liberal education, and such instruction especially as may be of service in the manufactures, commerce, and industrial pursuits of the Midlands. Arts, Medicine, and the Biological departments are still housed in the buildings of Mason College in the centre of the city. Other buildings have been erected and equipped at a cost of £750,000 at Bournbrook on a site of 40 acres.

LIBRARY, about 75,000 vols. MUSEUMS, Anat., Dent., Geol., Zool. LABORATORIES: Chemical (with special organic, phys., electro-chem., analytical, and public health depts.) ; Engin., Metallurgy, and Mining (exceptionally well equipped and including coal-mining research lab., expl. coal-mine and oil-boring plant, petroleum engineering being a speciality) ; Brewing ; Power-Station supplying whole Univ. with lighting, heat, and power. A small OBSERVATORY is attached to the dept. of Physics. HOSPITALS (600 beds) available for clinics—General, Queen's, and many special.

FACULTIES. Arts (including Music), Science (Pure and Applied), Medicine (including Dentistry and Public Health), Commerce. *Departments of Education* (training for teaching in primary and secondary schools), Social Study, Industrial certificates. *University Research Committee.*

MATRICULATION. See Appendix XXI.

DEGREES, ETC. B.A., B.Mus., M.A., M.Mus., D.Phil., D.Litt. ; B.Sc. (in Pure Science, or in Engineering—Civ., Elec., or Mech., Metallurgy, or Mining), M.Sc., D.Sc. ; M.B., Ch.B., B.Sc. (Pub. Health), B.D.S., M.D., Ch.M., M.D.S. ; B.Com., M.Com. ; Ph.D. (in any Faculty) ; LL.D. (Honorary). No degree can be obtained without attendance upon prescribed courses in the Univ. extending over at least 3 academic yrs. after matricn. except in the case of graduates of other Univs., who are, under certain conditions, admitted to the 1-yr. courses for the M.A. and M.Sc. and to 2 yrs.' courses for the B.Sc. (courses in technical subjects), B.Com., Ph.D. (v. p. 15), M.D., or Ch.M.

B.A. Honours schools in Classics, French, German, Engl. Lit., Hist., Social and Polit. Sc., Maths., Music.

In the B.Com. courses one-third of the student's time may, if he chooses, be devoted to work in Applied Science.

The B.Sc. with Honours requires 3 yrs. after the Intermediate standard has been reached. The B.Sc. courses in Engineering cover 4 yrs. Those in Mining involve practical work underground. Graduates of Oxford who have obtained the Ox. Dipl. in Scientific Engin. and Mining are eligible, subject to certain provisos, for the B.Sc. in Engin., Mining, or Metall. after 2 yrs.' study in Birmingham.

Med. students may spend their 5th yr. at any school or schools of Med. recognized by the Univ., and the Senate may recognize examns. passed therein as exempting from the 1st Med. examn. They may obtain the B.Sc. as well as their Med. degree by devoting 6 yrs. instead of 5 to study in the Univ.

Candidates for the B.Mus. (Honours) must have passed the matricn. or an equivalent examn. and an examn. in the Rudiments of Music, and power of performance on some musical instrument.

The M.A., M.Com., and M.Sc. involve at least 1 yr. of study after completing the course for the bachelorship.

The M.A. may be taken in Educn. and in Music as well as in the ordinary Arts subjects.

The D.Phil. or D.Litt., M.Mus., and D.Sc. may be taken 3 yrs. after the M.A., B.Mus., or M.Sc.

*Advanced Standing.* Candidates who pass at entrance certain examns. ordinarily taken after the first year of a degree course may take the final examn. for the B.A. or B.Sc. at the end of their second year and the M.A. at the end of their third year. Certain examns. of other approved Univs. and Examining Bodies are accepted as qualifying for such advanced standing.

*Diplomas.* *Art* Instructor's (2 yrs.' course), for students of the Municipal School of Art; *Brewing* (3 yrs.' course), Brewing Special for graduates (1 yr.); Graduates' *Commerce* (1 yr. course), open to graduates of any Univ. who have passed an adequate test in accounting; *Mining*; *Social Study* (1 yr. or, Higher Dipl., 2 yrs.' course preparatory for public administration, charity organization, factory welfare, trade union official work, etc.); Secondary, Primary, or Continuation School *Teachers'* (1 yr. course), for graduates of a Univ. of the U.K. or others equally qualified.

An *Industrial Certificate* class has been instituted under the control of a joint board of Univ. and Trade Union representatives. This class provides two full days' instruction to members of Trade Unions, nominated by their Unions, in English Literature, Modern History, Economics, and Elementary Science. The work is organized by a special tutor, appointed and paid by the Univ. The class is held in all three terms of the Univ. session, and at the end an Industrial certificate is awarded after examn. The class is a new departure, as it is not based on the principle of evening work but on full-time day work, and the instruction is provided by members of the Univ. Staff. Evening classes are not provided by the Univ., this work being left to the Birm. and Midland Inst., Munic. Tech. Sch., etc.

**RESEARCH.** A joint standing committee of lay members of council and academic members of senate co-ordinates research work in all faculties, formulates policies of research, obtains funds, and co-operates with Gov. agencies and external bodies. Trust Funds (Spencer and Holcroft) amount to £10,000.

**FEES.** Matricn., £2. Tuition for B.A., £75; B.Sc., £75-£96; Engin., £221; Mining, £146-£198; Metall., £129-175; Med., including Hospl. fees, £170. Examns., Interm. and Final, for first degree £10, except in Med., £20, and Engin., £12: 10s. Laboratory research fees average about £20.

**SCHOLARSHIPS** for advanced students. Walter Myers (Travelling), £150 for 1 yr., renewable, for research in Path. or Clin. Med., open to graduates in Med. and Surg. of Birm. (who have also obtained the B.Sc.), London, Ox., or Camb.; 10 Scientific Research, tenable for 1 yr. (6 of £90 and 4 of £50 each), are offered annually.

**RESIDENCE.** For women there is a Hostel—Univ. House, Edgbaston Park Rd. (Warden), with grounds of 2½ acres; for 70 men students—Chancellor Hall, Augustus Road, Edgbaston. The cost of board and lodging is from £2 : 2s. upwards a week.

**AN APPOINTMENTS BOARD** (Secy.—The Registrar) has been established.

**UNIVERSITY EXTENSION** work includes Lectures and Tutorial Classes in the city and neighbouring towns.

**PUBLICATIONS.** *Calendar* (Oct.), 2s.; Sectional Prospectuses (April); students' magazine, *The Mermaid*, 6d.

## THE YEAR 1921-22

**BENEFACTIONS.** Chamber of Commerce, £3500 for Chair of Italian; Feeney (£500), Morton (£2000), F. E. Muntz (£1000) and Richard Peyton (£2000 for Chair of Music) bequests; James Watt Memorial Fund, £5000 towards Research Chair in Mech. Engin.; many smaller gifts.

**NEW DEVELOPMENTS.** *Library* Staff augmented for compilation of new catalogues. Gift of 300 vols. from French Gov. for the French Circle in the Univ. and the Anglo-French Society. *Chancellors Hall* of residence for 70 Men Students (Warden, E. W. Gillett, B.A. Linc. Coll. Oxford) was opened. *The Joint Standing Committee for Research* (v. *supra*) received an anonymous gift of £1050. The *Department of Mining* was divided into two under the Profs. of Coal and Metal Mining and Petroleum Mining respectively. The new *Muirhead Lectureship* in Social Philosophy was held by Emeritus Prof. J. H. Muirhead. Candidates for the M.Sc. in any subjects for which an *Honours School* exists will in future have to graduate in that school. A scheme for establishing a new *relation with Technical Institutes, etc.*, was approved, and the Senates of the Univs. of Liv., Manc., Sheff., and Leeds were consulted on certain aspects of it. A Special Course for *Medical Graduates* on recent research in psychology and treatment of crime attracted much attention. Provision was made for a Joint Board of *Research into Mental Disease* in co-operation with the Asylums Committee of the City. *The Town Planning and Civic Design Course* was much strengthened, thanks to an extended grant from the Bournville Village Trust. Public lectures were given on Historical and Civic Aspects of Town Planning.

**NUMBER OF STUDENTS.** Preparing for degrees—in Sc. 610, Arts 265, Med. 270, Com. 96; diplomas—in Arts 156, other Faculties 249; research and post-grad. students—in Sc. 63, Arts 25. Total full-time students 1782 (including 489 women); part-time 128. Students attending three-year Tutorial classes (W.E.A.)—in Econ. 125, Sociol. 48, Lit. 44, Engl. Hist. 11, Indust. Hist. 98, Social Psych. 51. New entries, session 1922-23, in Sc., pure and applied, 194; Arts, including Music and Educn., 177; Commerce 19; Social Study and Indust. Certif. 31; Med. and Dent. 100.

**HONORARY DEGREE (M.A.)** conferred on B. V. Jackson.

**OTHER DEGREES.** B.A., 75, including 34 women; B.Sc., 230 (women, 10); B.Com., 28 (w., 1); M.B., Ch.B., 15 (w., 6); B.Mus., 3; M.Sc., 45 (w., 3); M.A., 15 (w., 8); Ch.M., 1; M.Com., 3; D.Sc., 1; Ph.D., 7; M.D., 2; D.Litt., 2.



# UNIVERSITY OF BRISTOL

VISITOR—H.M. THE KING.

CHANCELLOR—Rt. Hon. VISCOUNT HALDANE OF CLOAN, O.M., K.T., D.C.L., LL.D., F.R.S. (*ex officio* President of Court, Council, and Convocation).

PRO-CHANCELLORS—Rt. Hon. HENRY HOBHOUSE, M.A., LL.D. ; G. A. WILLS, LL.D. ; The Rt. Rev. the LORD BISHOP OF BRISTOL, D.D., LL.D. ; STANLEY H. BADOCK.

VICE-CHANCELLOR—THOMAS LOVEDAY, M.A. OX.

PRO-VICE-CHANCELLOR—Prof. F. FRANCIS, D.Sc., Ph.D., F.I.C.

TREASURER—STANLEY H. BADOCK.

REGISTRAR—JAMES RAFTER, M.A.

TUTOR TO THE WOMEN STUDENTS AND WARDEN OF THE UNIV. HALL OF RESIDENCE FOR WOMEN—MAY C. STAVELEY, M.A.

LIBRARIAN—E. SIBREE, M.A.

MEDICAL LIBRARIAN—C. KING RUDGE, M.R.C.S., L.R.C.P.

## ASSOCIATED INSTITUTIONS

(In which specialized teaching is given or facilities for research are afforded.)

(1) BRISTOL BAPTIST COLLEGE. *Principal*—C. D. Whittaker, LL.D.

(2) WESTERN COLLEGE, BRISTOL. *Principal*—R. S. Franks, M.A., D.Litt.

(3) THEOLOGICAL COLLEGE, SALISBURY. *Principal*—C. T. Dimont, M.A., B.D.

(4) S. BONIFACE COLLEGE, WARMINSTER. *Principal*—J. W. S. Tomlin, M.A.

(5) NATIONAL FRUIT AND CIDER INSTITUTE, LONG ASHTON (v. *infra*, LABORATORIES). *Director*—Prof. B. T. P. Barker, M.A.

(6) REDLAND HIGH SCHOOL & COLSTON'S GIRLS' SCHOOL, BRISTOL, for kindergarten training.

The *Royal Agricultural College, Cirencester*, founded in 1845 and associated with the Univ. from 1910, was closed during the war, but is now reopening with M. J. R. Dunstan, O.B.E., M.A., as Principal.

N.B.—All members of the Teaching Staffs of (1), (2), (3), (4), and (5) are members of the Teaching Staff of the Univ.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

[(C.)=Clinical Lecturer; (R.)=Recognized as qualified to instruct undergraduates studying for degrees; (S.)=Special Lecturer.]

*Agriculture*

- Barker, B. T. P., M.A. Camb. (A. Biology) Prof.  
 Wallace, T., M.Sc. Durh., A.I.C. (A. Chem.) Lectr.  
 . . . . . (Mycology) Lectr.  
 Grove, O. (Enology) Lectr.  
 Lees, A. H., M.A. Camb. (Plant Path.) Lectr.  
 Spinks, G. T., M.A. Camb. (A. Botany) Lectr.  
 Tutin, F. (Bio-Chem.) Lectr.  
 Peren, G. S., B.S.A. Tor. (Pomology) Lectr.  
 Summers, F., B.A. Camb., M.Sc. Liv. (Plant Physiology) Lectr.  
 White, J. W. (Systematic B.) (S.).  
 Gardiner, G. F., F.R.H.S. (Gardening) (R.).

*Chemistry*, v. also Agric.

- Francis, F., D.Sc. Manc., Ph.D. Erl., F.I.C. A. C. Pass Prof.  
 Davis, O. C. M., D.Sc. Lond., D.Sc., M.D., Ch.B., F.I.C. (also Lectr. in Med. to Dental Students and Demr. in For. Med. and Toxicol.) Lectr.  
 Rixon, F. W., M.Sc. Manc., Ph.D. Gies., F.I.C. Lectr.  
 Taylor, Millicent, D.Sc., A.I.C. Demr.  
 Fullman, B., B.Sc. Lond. Demr.

*Chemistry, Applied*, v. p. 31.

- Chemistry, Hygienic* [Lectr.  
 Russell, E., B.Sc. Lond., F.I.C.

*Chemistry, Physical*

- McBain, J. W., M.A. Tor., Ph.D. Heid., F.I.C.  
 Leverhulme Prof.  
 Laing, Mary E., M.Sc. Research Asst.

*Classics* [H. O. Wills Prof.

- Dobson, J. F., M.A. Camb. (Greek) Prof.  
 Brooks, F., M.A. Ox. Lectr.  
 Pitman, H., M.A. Ox. Lectr.

*Dental Mechanics*

- Wing, J. C., L.D.S. Lectr.

*Dental Surgery*, v. also Chem. and Surg. [Lectr.

- Ackland, W. R., M.R.C.S., M.D.S.  
 Nichols, F. C., M.B., Ch.B., L.D.S. (also in D. Anat.) (C.).  
 Kettlewell, N. H., L.D.S. (R.).  
 Rigg, S. K., L.D.S. (R.).  
 Claremont, L. E., L.D.S., M.R.C.S., L.R.C.P. (Lectr. in Op. D.S.) (C.).

*Anatomy*

- [Prof.  
 Fawcett, E., M.D., C.M. Edin.  
 Stock, W. S. V., M.B., Ch.B., M.B., B.S. Lond., F.R.C.S. Demr.  
 Llewelyn, Miss G. R., B.Sc. Demr.  
 Adams, A. W., M.B., B.S. Lond., F.R.C.S. Demr.  
 Moore, C. A., M.S., M.B. Lond., Ch.M., F.R.C.S. (Surg. and Applied Anat.) Lectr.

*Anthropology*

- . . . . . Lectr.

*Arabic, Aramaic, etc.*, v. Orient.*Art*

- . . . . . (S.).

*Bio-Chemistry*

- Nierenstein, M., Ph.D. Bernc, D. ès Sc. Gen. Lectr.

*Botany*

- Darbishire, O. V., B.A. Ox., Ph.D. Kiel Prof.  
 Hunter, C., M.Sc. Durh. Lectr.  
 Lee, Miss E. M., M.Sc. Lectr.  
 Gilchrist, Miss G., B.Sc. Demr.

*Economics*, v. also Loc. Govt.  
Phillips, H., M.A. Ox. Lectr.

*Education*  
Wodehouse, Helen M., M.A.,  
D.Phil. Birm. Prof.  
Pease, Marian F., LL.D. (S).  
Foster, T. S., M.A. Ox., Master of  
Method (S).  
Mullock, Amy, M.Sc. Manc., M.A.  
Mistress of Method.

Asst. Lectrs.:  
Childs, E. C., M.A., B.D. Lond.  
Carré, M. H., M.A. Ox.  
Nicholson, J. H., B.A. Ox.  
Morgan, L. T., B.Sc.  
Harvey, A. C., M.A. Manc.  
Odell, D. Anstace.  
Whitwill, Gladys C., N.F.U.  
Davies, Hilda M., M.A. Wales  
Dale, H. Barbara.  
Byrne, Miss J. W. (Kindergarten).  
Wilson, Miss R. M. (Kindergarten).  
Watson, A. J., A.R.C.A.  
Drawing (R.).  
Warrell, A., F.R.C.O. Music (R.).  
Carlson, J. E. G. Phys. Exerc. (R.).  
Jennings, Miss E. S. „ „

*Engineering*, v. p. 32.

*English* [Winterstoke Prof.  
Crofts, J. E. V., B.A., B.Litt. Ox.  
Haworth, P., M.A. Manc., Ph.D.  
Innsb. Lectr.  
Birkhead, Edith, M.A. Liv. Lectr.

*French*, v. also p. 32. [Prof.  
Boillot, F., M.A. Shef., L. ès L.  
Perkins, B. N., M.A. Camb. Lectr.

*Geography* [Lectr.  
Jervis, W. W., M.Sc. Durh., F.G.S.

*Geology*  
Reynolds, S. H., M.A., Sc.D.  
Camb. C. Wills Prof.  
Turner, H. W., B.A. Ox. Lectr.  
Wallis, F. S., M.Sc. Asst. Lectr.  
Smith, S., M.A. Camb., D.Sc.  
Durh. Asst. Lectr.

*German*  
Ord, C., M.A. Camb. Lectr.  
Ord, Evelyn Asst. Lectr.

*Hebrew*, v. Orient. Langs.

*History*  
Leonard, G. H., M.A. Camb., M.A.  
(Modern H.) H. O. Wills Prof.  
Staveley, May C., M.A. Dub.,  
M.A. Lectr.  
Cooper, W. L., M.A. Ox. Lectr.  
Gardner, Alice, M.A. (Byzantine  
H.) Reader.  
MacInnes, C. M., B.A. Ox. and Dal.  
Lectr.

*Italian*  
Gualtieri, Signa. E. Lectr.

*Law*  
Wilshere, A. M., M.A., LL.B.  
Lond. (S).  
Chilton, C. A. (S).

*Local Government*  
Cashmore, Hilda, M.A. Ox. Lectr.

*Mathematics*  
Hassé, H. R., M.A. Camb., D.Sc.  
Manc. H. O. Wills Prof.  
Todd, H., B.A. Camb. Lectr.  
Vint, J., M.A. Belf. Lectr.  
Fraser, P., M.A. Camb., B.Sc.  
Aberd. Lectr.

*Maths., Applied*  
Boulton, E. S., M.A. Camb., B.Sc.  
Lond. Prof.

*Medicine*, v. *infra*

*Military Subjects*  
Berney-Ficklin, Major H. P. M.,  
M.C. (S).

*Mining*, v. Engin.

*Music*  
..... (S).

*Oriental Languages*  
Sibree, E., M.A. Ox. Lectr.  
Segall, J. (Arabic) (S).  
O'Leary, De L., M.A., D.D. Dub.  
(Aramaic and Syriac) (S).  
Polack, J., B.A. Lond. (Hebrew)  
(S).

*Palæontology*  
Bolton, H., M.Sc. Reader.

*Philosophy*

Broad, C. D., M.A., Litt.D. Camb.  
Prof.

*Physics*, v. also Chem.

Tyndall, A. M., D.Sc. Lond., D.Sc.  
H. O. Wills Prof.

Williams, Illtyd, M.Sc. Wales  
Lectr.

Piper, S. H., B.Sc. Lond. Lectr.

George, H. E., B.A. Ox. Asst. Lectr.

Sucksmith, W., B.Sc. Leeds  
Asst. Lectr.

*Physiology*

Buckmaster, G. A., M.A., M.D.,  
B.Ch., D.P.H. Ox.

H. O. Wills Prof.

Short, A. R., B.Sc., M.D., B.S.  
Lond., F.R.C.S. Lectr.

Hickman, H. R. B., M.A., B.M.,  
B.Ch. Ox. Lectr.

Rowell, Miriam Lectr.

*Public Health*

Davies, D. S., M.D. Lond., LL.D.,  
D.P.H. Lectr.

Heaven, J. C., M.R.C.S., D.P.H.  
Demr.

Fraser, A. D., M.A., B.Sc., M.B.,  
Ch.B. Glas., D.P.H. Asst. Lectr.

Askins, R. A., M.A., M.D. Dub.,  
D.P.H. Camb. Demr.

Faill, C. J. C., L.R.C.S., L.R.C.P.,  
F.R.C.P. Edin. Demr.

Marshall, H. S., A.K.C.

Mackesy, T. L., M.A.

Matravers, Miss E. C.

*Zoology*

[Lectr.  
Henderson, W. D., M.A., B.Sc.

Aberd., Ph.D. Freib. i/B.

Henderson, Mrs. I. F., M.A. Aberd.

Asst. Lectr.

Medicine (for subjects of first 2  
yrs.—Anat., etc., v. *supra*)

*Anæsthetics*

[(C.).  
Freeman, J., M.D. Durh., F.R.C.S.

Flemming, A. L., M.B., Ch.B. (C.).

Hill, Hedley, M.D. Durh. (C.).

Corfield, C., M.R.C.S., L.R.C.P.

(C.)

*Tutors:*

Stock, W. S. V., M.B., B.S. Lond.,  
F.R.C.S.

Logan, H. B., M.R.C.S., L.R.C.P.

*Bacteriology*, v. Pathology*Diseases of the Skin*

Wills, W. K., M.A., M.B., B.Ch.  
Camb. (C.).

Nixon, J. A., C.M.G., B.A., M.D.  
Camb., F.R.C.P. (and in

Med.) (C.).

- Symes, J. O., M.D. Lond., D.P.H. (C.).  
 Coombs, C. F., M.D., B.S. Lond., F.R.C.P. (C.).  
 Charles, J. R., M.A., M.D. Camb., F.R.C.P. (C.).  
 Nixon, J. A., C.M.G., B.A., M.D. Camb., F.R.C.P. (C.).  
 Clarke, R. C., M.B., Ch.B. (C.).  
 Clarke, C., M.D., B.S. Lond. (C.).  
 Birrell, J. A., M.B., B.S. (R.).  
 Herapath, C. E. K., M.D., B.S. Lond. (C.).

*Medicine (Dental Students)*

Davis, O. C. M. (v. Chem.) Lectr.

*Mental Diseases*

Blachford, J. V., M.D., B.S., Durh. (C.).

*Obstetrics*

Swayne, W. C., M.D., B.S. Lond., M.D., Ch.B. Prof. (C.).  
 Rayner, D. C., F.R.C.S. (C.).  
 Statham, R. S. S., M.D., Ch.M. (C.).  
 Newnham, W. H. C., M.A., M.B. Camb. (C.).  
 Baker, Lily, B.A., M.B., Ch.B. Dub., F.R.C.S.I. (R.).

*Ophthalmology*

Walker, C. H., B.A., M.B. Camb., F.R.C.S. Lectr.\*  
 Cross, F. R., M.B. Lond., LL.D., F.R.C.S. Reader.  
 Iles, A. E., M.B., B.S. Lond., F.R.C.S. (C.).  
 Chambers, F. R., F.R.C.S.E., D.O., M.R.C.S., L.R.C.P. (C.).

*Pathology*

Hall, I. W., M.D., Ch.B. Manc. [Prof.]

*Path. and Bacteriology*

Fraser, A. D., M.B., Ch.B. Glas., D.P.H. Demr.  
 Todd, A. T., M.B., Ch.B. Edin. Demr.

Hadfield, G., M.D., B.S. Lond. (R.).

*Pharmacology and Therap.*

Neild, N., M.B., Ch.B. Manc.

Lectr.\*

*Pharmacy (Practical)*

Taylor, A. L., M.P.S. (R.).  
 Thomas, Wm., M.P.S. (R.).

*Radio-Therapy*

Mayes, F. J. A., M.R.C.S., L.R.C.P. (C.).

*Skiagraphy*

Bergin, F. G., M.R.C.S., L.R.C.P. (C.).

*Surgery*

Morton, C. A., F.R.C.S. Prof.  
 Groves, E. W. H., M.D., M.S., B.Sc. Lond., F.R.C.S. Prof.  
 Firth, J. L., M.D., M.S. Lond., F.R.C.S. (C.).  
 Carwardine, T., M.B., M.S. Lond., F.R.C.S. (C.).  
 Chitty, H., M.B., M.S. Lond., F.R.C.S. (C.).  
 Walters, C. F., F.R.C.S. (C.).  
 Moore, C. A., M.S., M.B. Lond., Ch.M., F.R.C.S. (C.).  
 Short, A. R., B.Sc., M.D., B.S. Lond., F.R.C.S. (C.).  
 Wood, D., F.R.C.S. (C.).  
 Adams, A. W., M.B., B.S. Lond., F.R.C.S. (R.).  
 Smythe, H. J. D., M.S. Lond. (Lectr. to Dental Students) (R.).  
 Lansdown, R. G. P., M.D., B.S. Durh. (*Practical Surgery*) (C.).

*Engineering*

(In the Technical College of the Society of Merchant Venturers)

*Applied Chemistry*

Wertheimer, J., B.A. Lond., D.Sc., F.I.C. Prof.  
 Andrews, W. A., B.Sc. Birm., A.I.C. Lectr.

\* Head of Dept.

Marsden, A., A.I.C.	(R.).	Stephens, G. A., B.Sc.	
Popham, F. J. W., A.I.C.	(R.).	Asst. Lectr. (Mech. E.).	
		5 Instrs.	
<i>Automobile Engineering</i>		<i>Mining</i>	
Morgan, W., B.Sc., M.I.A.E.	Prof.	Sampson, L.	(R.).
Marsden, J. E.	(R.).	Seymour, A. T.	(R.).
<i>Civil Engineering</i>		<i>French and German for Engin.</i>	
Ferrier, R. M., M.Sc.	Glas.,	<i>Students</i>	
M.I.C.E., M.I.M.E.	Prof.	Shepherd, Dorothy B.	Asst. Lectr.
Francis, W. E., B.Sc. Wales.	Lectr.	<i>Maths. and Physics for Engin.</i>	
<i>Engineering Comm. Subjects</i>		<i>Students</i>	
Griffin, A.	Lectr.	Pickering, A., B.Sc. Manc.	(R.).
		Smith, A., B.Sc. Lond.	(R.).
		Stockall, G. E., B.Sc. Lond.	(R.).
		Palmer, W. P., B.Sc. Lond.	(R.).
		Banfield, A. D., B.Sc.	(R.).
		Pugh, G., B.Sc.	(R.).
		Rogers, T., B.Sc. Lond.	(R.).
		Tincknell, G. M., B.Sc.	(R.).
		Wrightson, F. B., B.Sc.	(R.).
<i>Electrical Engineering</i>		<i>Adult Education</i>	
Robertson, D., D.Sc.	Glas.,	Extra-mural Lecturers : 26 mem-	
M.I.E.E.	Prof.	bers of the staff (Secy., Prof.	
Holmes, S., A.M.I.E.E.	Lectr.	J. E. V. Crofts), including 5	
2 Instrs.		for Tutorial Classes.	
<i>Mech. and Mining Engineering</i>			
Robertson, A., D.Sc.	Edin.,		
M.I.Mech.E., A.M.I.C.E.			
	Prof.		
Watson, F. R. B., B.Sc.	Edin.		
	Lectr. (Mech. E.).		

## GENERAL INFORMATION

University College, Bristol, founded in 1876, was dissolved in 1909 on the incorporation by Royal Charter of the Univ. of Bristol. The main buildings, including a large extension estimated to cost about £500,000, temporarily stopped by the war, but now being proceeded with, a new building for the accommodation of the Physics department at a cost approaching £200,000, and other projected additions, when complete, will cover a site of 16 acres near the centre of the city on high ground adjoining residential districts. The Municipal Museum and Art Gallery adjoin.

The TECHNICAL COLLEGE OF THE SOCIETY OF MERCHANT VENTURERS provides accommodation for and maintains the Faculty of Engineering of the University. Dean of the Faculty—Prof. J. Wertheimer, B.A., D.Sc., F.I.C.

LIBRARIES, 45,000 vols. LABORATORIES: Scientific, Medical, and Engineering, all equipped for purposes of research. Agri-Horticultural station at Long Ashton with Expl. fruit plantations 268 acres devoted to research in fruit-culture, cider-making, plant diseases and their treatment, etc. Hospitals available for clinical study, 2 General (618 beds), Children and Women (108), Eye (40), in all 766 beds.

**MATRICULATION.** In common with all other English Univs., Bristol holds School and Higher School Certificate Examns., at which candidates may qualify for matricn. It also recognizes, subject to certain conditions, School Certifs. and Higher School Certifs. approved as such by the Bd. of Educn., Senior and Higher Certifs. of the Central Welsh Board, Scottish Leaving Certif. in Higher or Honours grade, Special Army Educn. Certif., Matricn. Examn. of any Univ. of the U.K., Responsions of Oxford, Previous Examn. of Cambridge, and graduation in any approved Univ., as qualifying for matricn. The Senate may also declare eligible for matricn. a candidate educated outside the U.K. on proof of having passed equivalent examns., or, if from an Oriental country, of sufficient education and ability to follow instruction given in English.

**DEGREE COURSES.** B.A., B.Sc., B.Sc. in Engineering—3 yrs., including at least 2 in the Univ.; Honours in Arts and Pure Science—4 yrs., except for those who enter with Higher School Certif.; on an evening class curriculum—6 yrs. (Engineering 5 yrs.); by research in case of a graduate of another Univ.—2 yrs.; "Sandwich" Scheme of Training for Engineers, including 30 mos. in works—5 yrs. M.B., Ch.B.—5½, B.D.S.—5 yrs., or, for those who enter with Higher School Certifs. in Physics, Chem., Biol. (Dental-Biol. or Zool.), M.B., Ch.B.—4½, B.D.S.—4 yrs., including at least 3 in the Univ.

Instruction given in Theological subjects in the Associated Colleges to undergraduates of the Univ. by the Principal or teachers mentioned above is, for the purpose of the B.A. degree, deemed to be given in and by the Univ.

**HIGHER DEGREES.** M.A., D.Litt.; M.Sc., D.Sc. (in Pure Sc. or Engineering); Ch.M., M.D.; Ph.D. (see p. 15). Graduates of other Univs. are placed practically on the same footing as graduates of Bristol as far as regards facilities for proceeding to all these except the Medical Degrees. Candidates who graduate with Honours in Science may take the M.Sc. one yr. later. Otherwise the Mastership is not granted within 2 yrs. after graduating. The M.D. may be taken 2 yrs. after graduating in Med., the D.Litt. 4 yrs. after the M.A., and the D.Sc. 4 yrs. (3, if devoted to original work in the Univ.) after the M.Sc.

**DIPLOMAS.** Education (post-graduate) 1 yr., L.D.S. 4 yrs., D.P.H. (for fully registered medical practitioners of 1 yr.'s standing), 9 months, D.V.S.M. (for M.R.C.V.S. of 1 yr.'s standing), Engineering 3 yrs. (or evening classes 5 yrs.).

**CERTIFICATES.** Testamur in Educn., 1 yr.; Continuation School Teachers' Certif., 1 yr.; Testamurs in Social Study, 2 yrs.; Journalism, 3 yrs., or, if qualified for matricn., 1 yr.; Engineering Apprentices, 2 yrs.

**FEES.** Matricn., 3 gs.; Registration, £1:10s.; Tuition, annual, B.A., 24 (Theol. students, 20½) gs.; B.Sc., 30 gs.; B.Sc. in Engin., 40 gs. (Lab. practice alone, 4 gs. per term for one day a week); M.B., Ch.B., entire curriculum, 205 gs.; B.D.S., including mech. lab. and hospl. practice, 215 gs.; Testamur in Social Study, 2 yrs., 26½ gs.; Journalism, for each of 3 parts, 6 gs.; Degree examns., B.A. or B.Sc., 9½ gs.; Med., 24 gs.; Dent., 25 gs.; M.A. and M.Sc., 7 gs.; Ph.D., 9 gs.; others, 17 gs. Graduation: B.A., B.Sc., M.B., Ch.B., B.D.S., M.A., M.Sc., 2½ gs.; Ph.D., 4 gs.; Ch.M., M.D.S., D.Litt., D.Sc., M.D., 7 gs. Guild of Undergrads., £1:15s.; Univ. Union, £1:5s. per annum.

**RESEARCH.** The Colston Research Society devotes annually about £400 to the promotion of Research in the Univ. It offers, preferably to Bristol graduates, fellowships of £150 each, the money being provided by donors, who are allowed to determine the subject of the research and, subject to the approval of the Board of the Faculty, to nominate the holder. The donor has a right of

access to the research work and to receive the result of it 12 months prior to publication.

**SCHOLARSHIPS FOR GRADUATES.** £160 for research in Engin.; £45 and £30 (women only), 32 gs. (men only), for post-graduate course; £35 for Metall. research; £20 for study in English Lit.

**RESIDENCE.** Mortimer House and Canynge Hall for men—from £75 and £67: 10s. p.a.; Clifton Hill House and 4 other residences for women students—from 50 gs. p.a.

**PUBLICATIONS.** *Calendar*; Faculty prospectuses issued in July; annual report of Council; Students' Mag. *Nonesuch*, 9d.

## THE YEAR 1921-22

**SPECIAL EVENTS.** Death of Pro-Chancellor H. H. Wills, one of the University's greatest benefactors. Retirement of Vice-Chancellor Sir Isambard Owen, on whom an honorary fellowship was conferred.

**BENEFACTIONS.** Gifts, by late H. H. Wills, of Downside and Mortimer House as residences for men students; gift of 6 acres of land by Geo. A. Wills as extension of Univ. athletic ground.

**NEW DEVELOPMENTS.** At request of Development Commissioners and Ministry of Agric. the Univ. undertook the supervision of the experimental fruit and vegetable preserving factory at Chipping Campden; Assocn. of Alumni inaugurated.

**NUMBER OF DAY STUDENTS.** Total, 1160. Undergraduates pursuing degree curricula for B.A. and B.Sc., 452, including 212 4-yr. Training Students; M.B., Ch.B., 155; B.Sc. in Engin., 183; other Undergraduates, 90, including 78 in 2-yr. training. Of the 270 women Undergraduates 127 were preparing for the B.A., 64 for B.Sc., 37 for M.B., Ch.B. Post-graduates, 52, including 26 women. Other day students, 228, including 21 (2 women) 2-yr. training students and 49 (21 full-time) Engineering students. *Number of Evening Students*: 650 in Engineering; 3 others.

**DEGREES CONFERRED.** B.A.—56; B.Sc.—78; B.Sc. in Engin.—54; M.B., Ch.B.—9; B.D.S.—1; Degree of Master—14; Ph.D.—2; other Doctorates—2.

**EXTRA-MURAL WORK.** Tutorial classes, 5; 1-yr. classes, 14; short course of lectures for W.E.A.; lectures at Folk House; short courses of evening lectures; Saturday morning classes for teachers; extension lecture courses, 5; Saturday afternoon classes for miners; lectures to Bristol Assocn. of Science Teachers; popular Saturday lectures at Merchant Venturers' College; addresses to Scientific Assocns. Joint Adult Educn. Council formed for co-ordinating work in Bristol and Counties of Gloucester, Somerset, and Wilts. *Summer School* held under auspices of the Joint Committee on Tutorial Classes.



# UNIVERSITY OF CAMBRIDGE

CHANCELLOR—Rt. Hon. EARL OF BALFOUR, K.G., O.M., M.A., Hon. LL.D. Trin.

VICE-CHANCELLOR—E. C. PEARCE, D.D. Corp.

HIGH STEWARD—Rt. Hon. the EARL OF PLYMOUTH, G.B.E., LL.D. Joh.

DEPUTY HIGH STEWARD—J. F. P. RAWLINSON, LL.M., Hon. LL.D. Trin., K.C., M.P.

REPRESENTATIVES IN PARLIAMENT—J. F. P. RAWLINSON, LL.M., Hon. LL.D. Trin., K.C. ; J. R. M. BUTLER, O.B.E., M.V.O., M.A. Trin.

PROCTORS—R. H. FOWLER, M.A. Trin. ; A. D. BROWNE, M.A. Qu.

PUBLIC ORATOR—T. R. GLOVER, M.A. Joh.

REGISTRARY—J. N. KEYNES, Sc.D. Pemb.

LIBRARIAN—F. J. H. JENKINSON, M.A. Trin.

## HEADS OF COLLEGES

CHRIST'S	<i>Master</i>	Sir A. E. SHIPLEY, G.B.E., Sc.D.
CLARE	„	W. L. MOLLISON, LL.D.
CORPUS CHRISTI	„	E. C. PEARCE, D.D.
DOWNING	„	Prof. A. C. SEWARD, Sc.D.
EMMANUEL	„	P. GILES, Litt.D.
GONVILLE AND CAIUS	„	Sir H. K. ANDERSON, M.D.
JESUS	„	A. GRAY, M.A.
KING'S	<i>Provost</i>	Sir W. DURNFORD, G.B.E., LL.D.
MAGDALENE	<i>Master</i>	A. C. BENSON, C.V.O., LL.D.
PEMBROKE	„	W. S. HADLEY, LL.D.
PETERHOUSE	„	Sir A. W. WARD, Litt.D.
QUEENS'	<i>President</i>	T. C. FITZPATRICK, D.D.
ST. CATHARINE'S	<i>Master</i>	Rt. Rev. T. W. DRURY, D.D.
ST. JOHN'S	„	R. F. SCOTT, M.A.
SIDNEY SUSSEX	„	G. A. WEEKES, M.A.
TRINITY	„	Sir J. J. THOMSON, O.M., M.A., Hon. Sc.D.
TRINITY HALL	„	H. BOND, LL.D.
SELWYN (Public Hostel)	„	J. O. F. MURRAY, D.D.
FITZWILLIAM HALL (Non-Collegiate Students)	<i>Censor</i>	W. F. REDDAWAY, M.A. King's.

## RECOGNIZED COLLEGES FOR WOMEN

GIRTON	<i>Mistress</i>	Miss B. S. PHILLPOTTS, O.B.E., Litt.D. Dub.
NEWNHAM	<i>Principal</i>	Miss B. A. CLOUGH.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Agriculture</i> , v. also Estate Management, Forestry		<i>Architecture</i>
Wood, T. B., C.B.E., M.A. Cai.		Fyfe, T., F.R.I.B.A.
Mackenzie, K. J. J., M.A. Chr.	Drapers Prof.	Master of the School.
Venn, J. A., M.A. Trin.	Reader.	Lyon, T. H., M.A. Corp.
Amos, A., M.A., Down.	Gilbey Lectr.	Dir. of Design.
Barber, C. A., Sc.D. Chr.	Lectr.	<i>Art</i> [Slade Prof. of Fine Art.
Lectr. in Tropical A.		Prior, E. S., M.A. Cai.
<i>Agric. Botany</i>		<i>Astronomy</i> [Plumian Prof.
Biffen, R. H., M.A. Cath.	Prof.	Eddington, A. S., M.A. Trin.
<i>Agric. Physiology</i>	[Reader.	Smart, W. M., M.A. Trin.
Marshall, F. H. A., Sc.D. Chr.		Adams Astronomer.
<i>Anatomy</i> , v. also Zool.		<i>Astron. &amp; Geom.</i> [Lowndean Prof.
Wilson, J. T., M.A. Joh.	Prof.	Baker, H. F., Sc.D. Joh.
Duckworth, W. L. H., M.D., Sc.D.		<i>Astrophysics</i> , v. also Meteor.
Jes. (Human A.)	Reader.	Newall, H. F., M.A. Trin. (Dir. of
..... (Human A.)	Lectr.	Solar Phys. Obs.) Prof.
..... (Embryology)	Lectr.	Milne, E. A., M.A. Trin.
Appleton, A. B., M.A. Down.		Lectr. & Asst. Dir.
Reid, D. G., M.A. Trin.	Senr. Demr.	Wilson, C. T. R., M.A. Sid.
Hopkinson, A., M.A., M.B., B.Ch.	Junr. Demr.	Obs. in Meteorological Phys.
Emm.	Junr. Demr.	Baxandall, F. E., A.R.C.Sc.
Pennell, V. C., M.A., M.B., B.Ch.		Sen. Solar Physics Observer.
Pemb.	Addl. Demr.	Butler, C. P., A.R.C.Sc.
<i>Anglo-Saxon</i>		Sen. Solar Physics Observer.
Chadwick, H. M., M.A. Clare		Moss, W. Junr. Solar Phys. Obs.
Elrington and Bosworth Prof.		<i>Bibliography</i> [Sandars Reader.
<i>Anthropology</i> , v. Eth.		James, M. R., Litt.D. King's
<i>Arabic</i> , v. Oriental		<i>Bio-Chemistry</i>
<i>Archæology</i> , v. also Clas. A., Pal.		[Sir W. Dunn Prof.
Ridgeway, Sir Wm., Sc.D. Cai.		Hopkins, F. G., M.A. Trin.
Disney Prof.		Hele, T. S., M.D. Emm. Lectr.
		Peters, R. A., M.D. Cai.
		Lectr. & Senr. Demr.
		<i>Biology</i> [Quick Prof.
		Nuttall, G. H. F., Sc.D. Magd. (Dir.
		of Molteno Inst. of Parasitology)
		Keilin, D., B.A. Magd. Asst.
		Brindley, H. H., M.A. Joh.
		(Elem. B. for med. students)
		Demr.

- Botany*, v. also Agric.  
 Seward, A. C., Sc.D. Down. Prof.  
 Blackman, F. F., M.A. Joh. Reader.  
 Tansley, A. G., M.A. Trin. Lectr.  
 Brooks, F. T., M.A. Emm. Lectr.  
 Wadham, S. M., M.A. Chr. Senr. Demr.  
 Walton, J., B.A. Joh. Junr. Demr.  
 Briggs, G. E., M.A. Joh. (Plant Physiol.) Demr.
- Chemistry*, v. also Bio- and Phys. C. and Med. (Path.)  
 Pope, Sir Wm. J., K.B.E., M.A. Sid. Prof.  
 Mann, F. G., Down. Asst. to Prof.  
 Fenton, H. J. H., Sc.D. Chr. Lectr. and Demr.  
 Dootson, F. W., M.A. Trin. H. Lectr. and Addl. Demr.  
 McCombie, H., M.A. King's Addl. Demr.  
 Palmer, W. G., M.A. Joh. † Addl. Demr.  
 Berry, A. J., M.A. Down. †
- Chemistry, Organic*  
 Mills, W. H., M.A. Jes. Lectr.
- Chem. and Phys. for Hygiene, etc.*  
 Purvis, J. E., M.A. Corp. Lectr.
- Classical Archaeology*  
 Cook, A. B., M.A. Qu. Reader.
- Classics, Epigraphy, etc.*  
 Campbell, S. G., M.A. Chr. Lectr.  
 Pearson, A. C., Litt.D. Trin. (Greek) Reg. Prof.  
 Housman, A. E., M.A. Trin. (Latin) Kennedy Prof.  
 Ridgeway, Prof. Sir Wm., Sc.D. Cai. (v. Arch.) Brereton Reader.
- Crystallography*, v. Mineralogy
- Divinity*, v. also Orient. Langs., Religion [Ely Prof.  
 Brooke, A. E., D.D. King's
- Barnes, W. E., D.D. Pet. Hulsean Prof.  
 Bethune-Baker, J. F., D.D. Pemb. Lady Margaret's Prof.  
 Burkitt, F. C., D.D. Trin. Norrisian Prof.  
 Nairne, A., D.D. Jes. Reg. Prof.  
 Whitney, J. P., D.D. Emm. (Eccles. Hist.) Dixie Prof.  
 Cunningham, B. K., M.A. Trin. (Past. Theol.) Lectr.
- Economics*, v. also Geog., Geol., Pol. Econ. [Girdlers' Lectr.  
 Lavington, F., M.A. Emm.  
 Henderson, H. D., M.A. Cla. Lectr.
- Education* Lectr.  
 Fox, C., M.A. Chr. Lectr.\*
- Engineering*, v. *infra*
- English*  
 Coulton, G. G., M.A. Joh. Lectr.
- English Lit.* [K. Ed. VII. Prof.  
 Quiller-Couch, Sir A. T., M.A. Jes.
- Estate Management* [Reader.  
 Smith, F. B., C.M.G., M.A. Down.
- Ethnology*  
 Haddon, A. C., Sc.D. Chr. Reader.
- Forestry*  
 Dawson, W., M.A. Cai. Reader.  
 Stone, H., M.A. Lectr.  
 Cox, H. A., B.A. Gurney Lectr.
- French* [Drapers Prof.  
 Prior, O. H. P., M.A. Joh.  
 Stewart, H. F., D.D. Trin. Reader.
- Genetics* [Arthur Balfour Prof.  
 Punnett, R. C., M.A. Cai.
- Geodesy*  
 Lenox-Conyngham, Col. Sir G. P., M.A. Trin. Reader.
- Geography*, v. also Surv.  
 Lake, P., M.A. Joh. Reader.
- Geog., Historical and Econ.*  
 Stanners, R. W., M.A. Cai. Lectr.

\* Apptd. by Teachers' Training Syndicate.

† Recognised teacher for medical students.

- Geology*, v. also Mineral., Palæo-zool., Petrol.  
Marr, J. E., Sc.D. Joh. Woodwardian Prof.  
King, W. B. R., O.B.E., M.A. Magd. Asst.  
Nicholas, T. C., O.B.E., M.A. Trin. Demr.  
Rastall, R. H., Sc.D. Chr. (Econ. G.) Lectr.  
*German* [Schröder Prof.  
Breul, K., Litt.D. King's  
Bullough, E., M.A. Cai. Lectr.  
*Hebrew*, v. Oriental  
*History, Ancient*  
Reid, J. S., Litt.D. Cai. Prof.  
Glover, T. R., M.A. Joh. Lectr.  
*History, Eccl.*, v. Div.  
*History, Indian* [Lectr.\*  
Moriarty, G. P., M.A. Pemb.  
*History, Modern* [Reg. Prof.  
Bury, J. B., M.A. King's  
Temperley, H. W. V., O.B.E., M.A. Pet. Reader.  
*History, Naval*  
Rose, J. H., Litt.D. Chr., Vere Harmsworth Prof.  
*Hygiene*, v. Med.  
*Italian*  
Okey, T., M.A. Cai. Prof.  
Pettoello, Signor D., Dr. Phil. Torino Teacher.†  
*Law* [Downing Prof.  
Hazeltine, H. D., Litt.D. Down.  
*Law, Civil* [Reg. Prof.  
Buckland, W. W., M.A. Cai.  
*Law, English* [Reader.  
Hollond, H. A., O.B.E., M.A. Trin.  
*Law, Indian*  
Macleod, R. H., M.A. Cai. Lectr.\*
- Law, Internat.*  
Higgins, A. Pearce, C.B.E., LL.D. Down. Whewell Prof.  
*Literature* [Leslie Stephen Lectr.  
Grierson, Prof. H. J. C., of Edin.  
*Logic*, v. Philos.  
*Mathematics*  
Larmor, Sir Joseph, M.A., Hon. Sc.D., Joh., M.P. Lucasian Prof.  
Hobson, E. W., Sc.D. Chr. (Pure M.) Sadleirian Prof.  
Littlewood, J. E., M.A. Trin. Cayley Lectr.  
Berry, A., M.A. King's Lectr.  
Bromwich, T. J. I'A., Sc.D. Joh. Lectr.  
Grace, J. H., M.A. Pet. Lectr.  
Harrison, W. J., M.A. Clare Lectr.  
Herman, R. A., M.A. Trin. Lectr.  
Lamb, H., M.A., Hon. Sc.D. Trin. Rayleigh Lectr.  
*Medicine and Surgery*, v. *infra*  
*Metallurgy* [Goldsmiths' Reader.  
Heycock, C. T., M.A. King's  
*Meteorology, Electrical*  
Wilson, C. T. R., M.A. Sid. Reader.  
*Military Subjects*  
Thornton, Lieut.-Col. L., Hon. M.A. Cai. Director of Studies.‡  
*Mineralogy*  
Lewis, W. J., M.A. Trin. Prof.  
Hutchinson, A., O.B.E., M.A. Pemb. (Crystallography) Lectr.  
*Music*  
Stanford, Sir Charles V., Mus.D. Trin. Prof.  
Wood, C., Mus.D. Cai. (Harmony and Counterpoint) Lectr.  
*Oriental Langs.*, v. *infra*  
*Palæography*, v. also Bibliog.  
Minns, E. H., Litt.D. Pemb. Lectr.

\* Apptd. by Board of I.C.S. Studies.

† Apptd. by Spl. Board for Med. and Mod. Langs.

‡ Apptd. by Board of Military Studies.

- Palæozoology*  
Woods, H., M.A. Joh. Lectr.
- Parasitology*, v. Biol.  
*Petrology*  
Harker, A., M.A. Joh. Reader.  
Wordie, J. M., M.A. Joh. Demr.
- Philology, Comparative*  
Giles, P., Litt.D. Emm. Reader.
- Philosophy, Mental, and Logic*  
Ward, J., Sc.D., Hon. LL.D. Trin. Prof.  
Moore, G. E., Litt.D. Trin. (Moral Science) Lectr.  
Johnson, W. E., M.A. King's (Moral Science) Sidgwick Lectr.
- Philos., Moral*, v. also Religion.  
Sorley, W. R., Litt.D. King's Knightbridge Prof.
- Physical Chem.*  
Lowry, T. M., C.B.E., M.A. Trin. H. Prof.  
Rideal, E. K., M.A. Trin. H. H. O. Jones Lectr.
- Physics*, v. also Chem.  
Rutherford, Sir E., M.A. Trin. Cavendish Prof. of Expl. P.  
Thomson, Sir J. J., O.M., M.A., Hon. Sc.D. Trin. Prof.  
Dewar, Sir James, M.A. Pet. (Nat. Philos.) Jacksonian Prof.  
Searle, G. F. C., Sc.D. Pet. Lectr. & Demr.  
Wood, A., M.A. Emm. Lectr.  
Thirkill, H., M.A. Clare Demr.  
Bedford, T. G., M.A. Sid. Addl. Demr.\*  
Crowther, J. A., Sc.D. Joh. (v. also Med. Rad.) Asst. Demr.  
Appleton, E. V., M.A. Joh. Asst. Demr.  
..... Demr. to Jackson Prof.  
Whetham, W. C. D., M.A. Trin.\*  
Sleeman, C. M., M.A. Qu.\*
- Physiology*, v. also Agric., Bio-Chem.  
Langley, J. N., Sc.D. Trin. Prof.  
Barcroft, J., C.B.E., M.A. King's Reader.  
Hardy, W. B., M.A. Cai. Lectr.  
..... Lectr.  
Shore, L. E., O.B.E., M.A., M.D. Joh. Lectr.  
Roberts, Ff., M.D. Clare Junr. Demr.  
Parsons, T. R., M.A. Sid. Addl. Demr.  
Adrian, E. D., M.A., M.D. Trin. Lectr. in Advanced P.
- Physiol. of the Senses*  
Hartridge, H., M.D., Sc.D. King's (also Senr. Demr. in P.) Lectr.
- Political Economy*, v. also Econ.  
Pigou, A. C., M.A. King's Prof.
- Portuguese*, v. Spanish  
*Psychology, Exper.*  
Bartlett, F. C., M.A. Joh. (Dir. of the Psych. Lab.) Reader.  
..... Asst.  
Sprott, W. J. H., B.A. Cla. Demr.
- Religion, Philosophy of*  
Widgery, A. G., M.A. Cath. Lectr.
- Romance* [Reader.  
Braunholtz, E. G. W., M.A. King's
- Russian*  
Goudy, A. P., M.A. Clare Lectr.
- Sanskrit*, v. Oriental  
*Spanish* [Reader.  
Kirkpatrick, F. A., M.A. Trin.  
Salinas, Prof. Don P., of Seville Teacher.†  
..... Norman Maccoll Lectr. in Span. and Port.
- Statistics* [Lectr.  
Yule, G. Udny, C.B.E., M.A. Joh.

\* Recognized teacher for medical students.

† Apptd. by Spl. Board for Med. and Mod. Langs

*Surveying and Cartography*  
Debenham, F., O.B.E., B.A. Cai.  
R.G.S. Lectr.

*Theology*, v. Div.

*Zoology*, v. also Med. Entom.,  
Palæoz.

Gardiner, J. S., M.A. Cai. Prof.  
Borradaile, L. A., Sc.D. Selw.

Lectr.

Browne, F. Balfour, M.A. Cai.

Lectr.

Potts, F. A., M.A. Trin. H. (Demr.  
of Comp. Anat.) Lectr.

Gadow, H., M.A. King's (Morph.  
of Vertebrates) Reader.

Saunders, J. T., M.A. Chr. (Animal  
Morph.) Demr.

### Engineering

*Aeronautical Engineering*  
Jones, B. M., A.F.C., M.A. Emm.  
F. Mond Prof.

*Electrical Engineering*  
Lamb, C. G., M.A. Clare Reader.

*Mechanism and Appl. Mechanics*  
Inglis, C. E., O.B.E., M.A. King's  
Prof.

Peake, A. H., M.A. Joh.  
Senr. Demr.

Peel, T., M.A. Magd. Demr.

Womersley, W. D., M.A. Emm.  
Demr.

*Mechanical Engineering*  
Landon, J. W., M.A. Cla. Lectr.

*Thermodynamics*  
Lees, S., M.A. Joh.  
Hopkinson Lectr.

**Medicine** (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Hygiene*, v. also Chem. [Lectr.  
Graham-Smith, G. S., M.D. Pemb.

*Medical Chemistry*  
Cole, S. W., M.A. Trin. Lectr.

*Medical Entomology*  
Warburton, C., M.A. Chr. Demr.

*Medical Jurisprudence*  
..... Lectr.

*Medical Radiology & Electrology*  
Scales, F. Shillington, M.D. Jes.

Lectr.

Crowther, J. A., Sc.D. Joh.  
(Physics as applied to M.R.)  
Lectr.

*Medicine*  
Bradbury, J. B., M.D. Down.

Downing Prof.

Jones, E. Lloyd-, M.D. Down.  
Demr.

Inchley, O., M.D. Joh.  
Asst. to Prof. of Med.

*Pathology*  
Dean, H. R., D.M. Oxon. Prot.  
Cobbett, L., M.D. Trin. Lectr.  
Swann, M. B. R., M.A. Cai. Demr.

*Pathology, Special*  
Strangeways, T. S. P., M.A. Joh.  
Huddersfield Lectr.

*Path. Chem.*  
..... Lectr.

*Pharmacology*  
Dixon, W. E., M.A. Down (As-  
sessor to Reg. Prof. Physic)  
Reader.

*Physic*  
Allbutt, Rt. Hon. Sir T. Clifford,  
K.C.B., M.D., Hon. I.L.D.  
Cai. Reg. Prof.

*Surgery*  
Roderick, H. B., O.B.E., M.D.,  
M.Ch. Emm. Demr.

*Vaccination* [Teacher.  
Deighton, F., M.A., M.B. Pet.

Members of Hospl. Staff (not in-  
cluded under above subject-  
headings) approved as Univ.  
Teachers: J. Aldren Wright,  
M.D. Sid.; J. Griffiths,  
C.M.G., M.D., M.Ch. King's;  
A. Cooke, M.A. Trin., M.B.;  
G. S. Haynes, M.D. King's;  
W. H. Bowen, M.S.; C. H.  
Budd, M.A. Cla., B.M.

## Oriental Languages

*Arabic* [Sir T. Adams Prof.  
Browne, E. G., M.A., M.B. Pemb.  
Bevan, A. A., M.A. Trin.

Lord Almoner's Prof.  
..... Lectr.\*

*Aramaic*  
McLean, N., M.A. Chr. Lectr.

*Bengali*  
Samman, H. F., Emm. Lectr.†

*Burmese*  
Hertz, W. A., C.S.I. Lectr.†

*Chinese*  
Giles, H. A., M.A. Trin. Prof.

*Hebrew* [Reg. Prof.  
Kennett, R. H., D.D. Qu.

*Hindi, Urdu and,*  
Phillott, Lieut.-Col. D. C., M.A.  
Cai. Lectr.†

*Marathi*

Moore, R. A. Leslie, Pet. Lectr.

*Persian*

[Lectr  
Nicholson, R. A., Litt.D. Trin.  
Mirzá Zābīhu 'llāh Bihruz Lectr.

*Sanskrit*

Rapson, E. J., M.A. Joh. Proi  
Rouse, W. H. D., Litt.D. Chr  
(S. and Pali) Lectr.

*Talmudic*

Abrahams, I., M.A. Chr. Reader

*Tamil*

Wyatt, J. L., M.A., Chr. Lectr.†

*Telugu*

Parsons, F. C., M.A. Trin. Lectr.†

*Turkish*

..... Lectr.†

## Adult Education

35 Lectrs. v. pp. 54, 56.

\* Apptd. by For. Service Students' Committee.

† Apptd. by Board of I.C.S. Studies.

## THE COLLEGES

[College Lecturers are indicated by the names of subjects in italics.]

CHRIST'S COLLEGE. Founded 1505. Master—Sir A. E. Shipley, G.B.E., Sc.D., F.R.S.

Fellows : Campbell, S. G., M.A., *Classics*, Bursar ; Darwin, C. G., M.A., F.R.S., †*Maths.* ; Downs, B. W., M.A., †*Med. and Mod. Langs. and Engl.* ; Fay, C. R., M.A., *Hist. and Econ.* ; Grose, S. W., M.A., Librarian ; Haddon, A. C., Sc.D., F.R.S. (Reader in Ethnol.) ; Hobson, E. W., Sc.D., F.R.S. (Prof. of Pure Maths.) ; \*McLean, N., M.A., Senior Tutor, †Orient. Langs. and Moral Sciences, *Hebrew* ; \*Marshall, F. H. A., Sc.D., F.R.S., †Nat. Sc. and Agric. (Reader in Agric. Physiol.) ; Mercer, J., M.A., F.R.S., *Maths.* ; \*Rackham, H., M.A., *Classics* ; Saunders, J. T., M.A., Steward ; Valentine-Richards, A. V., M.A., Dean, †*Theol.* ; Vines, H. W. C., M.A., M.D., †*Med.* ; Wyatt, T. C., O.B.E., M.A., †*Mech.Sc.*

Other Lectrs., etc. : Marshall, T. H., M.A. Trin., †*Hist.* ; Rastall, R. H., Sc.D., *Nat. Sc.* ; Thatcher, W. S., M.A., †*Econ.* ; Wheatcroft, W. H., M.A., LL.D., Down. †*Law.*

CLARE COLLEGE. Founded 1326. Master—W. L. Mollison, M.A., LL.D.

Fellows : Berwick, W. E. H., M.A. ; Carey, G. V., M.A., Asst. Tutor,

\* Tutor.

† Director or Supervisor.

Steward; Chadwick, H. M., M.A., Prof. of Anglo-Saxon; Forbes, M. D., M.A., *Engl.*, Librarian; Fulford, H. W., M.A.; Harrison, W. J., M.B.E., M.A., *Maths.*, Finan. Tutor and Steward; Henderson, H. D., M.B.E., M.A., †*Econ.*; Landon, J. W., M.A., †*Engin.*; Priestley, R. E., M.A. Agr.; Roberts, Ff., M.A., M.D., †*Med.*, *Physiol.*; Telfer, W., M.A., †*Theol.*, Asst. Tutor and Dean; Thirkill, H., M.A., \**Phys. and Chem.*; Wardale, J. R., M.A., *Classics*; Wilson, G. H. A., O.B.E., M.A., Bursar.

Other Lectrs., etc.: Appleton, E. V., M.A., †*Mineralogy*; Brindley, H. H., M.A. Joh., *Biol. and Zool.*; Brooks, F. T., M.A., †*Bot.*; Gaskoin, C. J. B., M.A., †*Hist.*; Hope, J. M. V., M.A., *Philos.*; Scarborough, H. A., B.A., †*Chem.*; Vulliamy, E. O., M.A., †*Mod. Langs.*; Wheateroft, W. H., M.A., LL.D., †*Law*; Wordie, J. M., M.A., †*Geol.*; Johnson, W. E., M.A., †*Moral Sc.*

CORPUS CHRISTI COLLEGE. Founded 1352. Master—E. C. Pearce, D.D.

Fellows: † Butler, Sir Geoffrey, K.B.E., M.A., Librarian, *Hist.*; Campbell-Smith, W., M.A.; Clark-Kennedy, A. E., M.A., †*Med.*; Goodhart, A. L., M.A., *Law*; Hoskyns, E. C., M.A., †*Theol.*, Dean of Chapel; Morris, G. G., M.A., Steward, †*Classics*; Pickthorn, K. W. M., M.A., Dean of College, †*Hist.*; Pollock, C. A. E., M.A., President, Bursar; \*† Spens, W., C.B.E., M.A., *Nat. Sc.*; Thomson, G. P., M.A., †*Maths.*; Thouless, R. M., M.A.

Other Lectrs., etc.: Momber, R. M. S. T., M.A., †*Mod. Langs.*; Henderson, H. D., M.A., †*Econ.*; Petherbridge, F. R., M.A., †*Agric.*; Lyon, T. H., M.A., †*Archit.*

DOWNING COLLEGE. Founded 1800. Master—A. C. Seward, Sc.D., M.A., F.R.S., Prof. of Botany.

Fellows: † Amos, A., M.A., Bursar, *Agric. Sc.*; † Berry, A. J., M.A., *Chem. and Phys.*; Bradbury, J. B., M.D., F.R.C.P., Prof. of *Med.*; † Harris, D. L., M.A., Reader in *Law*; Hazeltine, H. D., Litt.D., Prof. of *Laws of England*; Kenny, C. S., LL.D. (supernumerary); Saunders, J. C., M.A.; † Thomas, H. Hamshaw, M.B.E., M.A., Dean and Steward, *Bot.*; \*† Widdicombe, J. H., M.A., *Physiol.*

Other Lectrs. and Supervisors: Appleton, A. B., M.A., *Human Anat.*; Brown, B. G., M.A., *Hist.*; French, C. H., M.A., *Maths.*; Johnson, W. E., M.A., *Mor. Sc.*; Morris, G. G., M.A., *Class.*; Portway, D., M.A., *Engin.*; Thatcher, W. S., M.A., *Econ.*; Webb, H. A., M.A., Trin., *Maths.*; Wheateroft, W. H., LL.D., *Law*; Wyatt, A. J., M.A. Chr., *Med. and Mod. Langs.*; Sayers, L. D., M.A., †*Biol.*, Chaplain.

EMMANUEL COLLEGE. Founded 1584. Master—Peter Giles, Litt.D., Reader in Comp. Philol.

Fellows: Allcock, W. B., M.A.; Attenborough, F. L., M.A., †*Engl.*; Bennett, G. T., Sc.D., F.R.S.; Burnaby, H., M.A., *Divinity*, Dean; Gardner, R., M.A., *Class.*, Bursar and Steward; \* Greenwood, L. H. G., M.A., *Class.*, Mod. Langs., Law, Mor. Sc., etc.; \* Hele, T. S., O.B.E., M.A., M.D. *Nat. Sc.*, †*Physiol.*; Jones, B. M., M.A., A.F.C., Mond. Prof. of *Aeronautics*; Lavington, F., M.A., †*Econ.*; Line, J., M.A., A.F.C., †*Bot.*; Peace, J. B., M.A.; Wallace, J. C., M.A., *Mech. Sc.*; Welbourne, E., M.A., *Hist.*; Whitney, J. P., D.D., Prof. of *Ecclesiast. Hist.*; \* Wood, A., M.A., *Nat. Sc.*; \* Wood, P. W., M.A., Librarian, *Maths.*

Other Lectrs., etc.: Brindley, H. H., M.A. Joh., †*Biol.*; Bullough, E., M.A. Cal., †*Mod. Langs.*; Johnson, W. E., M.A. King's, †*Mor. Sc.*; Naylor, E. W., Mus.D., *Music*; Spiers, C. H., M.A., †*Chem.*; Woods, H., M.A.,

\* Tutor.

† Director or Supervisor.



F.R.S., Joh., † Geol.; Ziegler, C. H., LL.M., † Law; Hopkinson, A., M.A., M.B., B.Ch., † Anat.

GONVILLE AND CAIUS COLLEGE. Founded 1348. Master—Sir H. K. Anderson, M.D., F.R.S.

Fellows: Allbutt, Rt. Hon. Sir T. C., K.C.B., M.D., F.R.S., Prof. of Physic; † Brooke, Z. N., M.A., *Hist.*; Buckland, W. W., M.A., Prof. of Civ. Law; † Bullough, E., M.A., *Mod. Langs.*, Steward; † Cameron, J. F., M.A., Bursar, *Maths. and Engin.*; Chadwick, J., Ph.D.; † Cook, S. A., M.A., Litt.D., *Heb. and Syriac*, *Comp. Study of Religions*; † Debenham, F., O.B.E., B.A., *Geol.*, etc.; Fisher, R. A., M.A.; Fox, H. M., M.A.; † Gallop, E. G., M.A., *Maths.*; Gardiner, J. S., M.A., F.R.S., Prof. of Zool.; Gross, E. J., M.A.; † Hardy, W. B., M.A., Sec. R.S., *Physiol.*; \* Hunkin, J. W., O.B.E., M.A., Dean, *Div.*; Layton, W. T., M.A., C.H., C.B.E.; Lock, C. N. H., M.A.; McLeod, A. R., B.A.; \*† McNair, A. D., C.B.E., LL.M., *Law*; Muir, M. M. P., M.A.; Myers, C. S., C.B.E., Sc.D., F.R.S., *Exp. Psych.*; Okey, T., M.A., Prof. of Italian; \*† Peters, R. A., M.A., M.D., *Physiol.*; † Phear, H. W., M.A., *Engin.*; Prior, E. S., A.R.A., M.A., Prof. of Fine Art; Punnett, R. C., M.A., F.R.S., Prof. of Genetics; Reid, J. S., LL.M., Litt.D., Prof. of Anc. Hist.; Ridgeway, Sir W., Sc.D., Prof. of Archæol.; † Scott, J. E., M.A., *Class.*; \*† Stratton, F. J. M., M.A., *Maths.*; Venn, J., Sc.D., F.R.S., President; † Vesey, W. T., M.A., *Class.*; Wallis, Rt. Rev. F., M.A., D.D.; † Wood, C., Mus.D., *Music*; Wood, T. B., C.B.E., M.A., F.R.S., Prof. of Agric.; Steward, G. C., B.A.

Other Lectrs. and Directors, etc.: Brindley, H. H., M.A. Joh., *Biol.*; Cooper, C. F., M.A. Trin., *Zool.*; Heigham, C., B.A., *Agric.*; McCombie, H., M.A., *Chem.*; Oliver, D. T., LL.M. Trin. H., *Law*; Reid, D. G., M.A., *Anat.*; Stanners, R. W., M.A., *Econ.*; Wadham, S. M., M.A., *Bot.*; Schneider, G. A. S., M.A., Librarian.

JESUS COLLEGE. FOUNDED 1496. Master—A. Gray, M.A.

Fellows: \* Abbott, E., M.A., *Classics*; Barnes, H., B.A., LL.B., *Law*; Charlesworth, M. P., B.A.; † Duckworth, W. L. H., M.D., Sc.D., Asst. Tutor, *Nat. Sc.* (Reader in Human Anat.); Duke, W. H., M.A., Steward, *Classics*; \*† Elliott, C. A., M.A., Librarian, *Hist.*; Foakes-Jackson, F. J., M.A., D.D.; Manning, B. L., M.A., Bursar, *Hist.*; † Mills, W. H., M.A., *Nat. Sc.*; Nairne, A., M.A., D.D., Asst. Tutor, Dean, *Theol.* (Prof. of Div.); Pars, L. A., B.A.; Quiller-Couch, Sir A. T., M.A., Prof. of Engl. Lit.; Watt, J. C., M.A.; Welsh, W., M.A., Asst. \*, *Maths.*

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KING'S COLLEGE. Founded 1441. Provost—Sir Walter Durnford, G.B.E., LL.D.

Fellows: Adcock, F. E., M.A., O.B.E., *Classics*; Baker, P. J., M.A.; Barcroft, J., M.A., F.R.S., C.B.E., Asst. Tutor, *Nat. Sc.* (Reader in Physiol.); Berry, A., O.B.E., M.A., Asst. Tutor, *Maths.*; Birch, F. L., M.A., O.B.E., Steward, *Hist. and Econ.*; Brooke, A. E., D.D., *Div.*, Prof. of Div.; Bury, J. B., M.A., F.B.A., Prof. of Mod. Hist.; Cholerton, A. T., M.A.; \* Clapham, J. H., Litt.D., C.B.E., *Hist. and Econ.*; Corbett, W. J., M.A., Bursar; Dickinson, G. L., M.A.; Durnford, H. G. E., M.A., Bursar; Grant-Ives, C. E., M.A.;

\* Tutor.

† Director or Supervisor.

Gray, J., M.A., Dean; Harris, W. M., M.A.; Hartridge, H., M.A., M.D.; Heycock, C. T., M.A., F.R.S., *Nat. Sc.* (Reader in Metallurgy); Hill, A. V., O.B.E., Sc.D., F.R.S.; Inglis, C. E., M.A., O.B.E., Prof. of Mechanism; Johnson, W. E., M.A.; Keynes, J. M., M.A., C.B., Bursar, *Econ.*; Knox, A. D., M.A.; Lubbock, A., B.A.; Lucas, F. L., B.A., *Engl.*; Macaulay, W. H., M.A., Vice-Provost; McCombie, H., M.A., Asst. Tutor, *Nat. Sc.*; Mann, A. H., Hon. M.A., Mus.D.; Milner-White, E., M.A., Dean and Chaplain; Pigou, A. C., M.A., Prof. of Pol. Econ.; Radcliffe, W. W., M.A.; Reddaway, W. F., M.A., *Hist. and Econ.*; Richmond, H. W., M.A., F.R.S., *Maths.*; Sheppard, J. T., M.B.E., M.A., *Classics*; Sills, H. H., M.A., Asst. Tutor, *Classics*; Sorley, W. R., Litt.D., Prof. of Mor. Philos.; Tilley, A. A., M.A., *Mod. Langs.*; Turner, L. B., M.A., *Mech. Sc.*; Walston, Sir Charles, M.A., Litt.D.; Wedd, N., M.A., Librarian; Wollaston, A. F. R., M.A., B.Ch., D.Sc.

**MAGDALENE COLLEGE.** Founded 1542. Master—A. C. Benson, C.V.O., LL.D., † *Hist.*

Fellows: Blackett, P. M. S., B.A.; Gaselee, S., C.B.E., M.A., † *Palæog.*; King, W. B. R., O.B.E., M.A., *Nat. Sc.*; Martin, B. K., B.A.; Morshead, O. F., B.A., Librarian and Asst. Steward; Nuttall, G. H. F., Sc.D., F.R.S., Prof. of Biol., † Med.; Peel, T., M.A., Bursar and Steward, † *Engin.*; Peskett, A. G., M.A.; \* Ramsey, A. S., M.A., President, † *Maths.*; Salter, F. R., M.A., Dean, † *Hist.*, † Econ.; Vernon Jones, V. S., M.A., Asst. Tutor, † *Classics*.

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**PEMBROKE COLLEGE.** Founded 1347. Master—W. S. Hadley, LL.D., *Classics and Mod. Hist.*

Fellows: Attwater, A. L., M.A., *Engl.*; Bethune-Baker, J. F., M.A., D.D., Prof. of Div.; Birtwistle, G., M.A., B.Sc., Asst. Tutor, *Maths.*; Browne, E. G., M.A., M.B., F.R.C.P., Prof. of Arabic, President; Comber, H. G., M.A., Treasurer (Estates), *Mod. Langs.*; Hutchinson, A., O.B.E., M.A., F.R.S., Asst. Tutor, *Nat. Sc.*; \* Lawson, J. C., O.B.E., M.A., *Classics and Mod. Greek*; McClelland, N. P. K. J. O'N., M.A., Bursar (Home), *Nat. Sc.*; Minns, E. H., Litt.D., Librarian, *Russian*; Pennell, V. C., M.A., M.B., B.Ch., F.R.C.S., † Med., *Nat. Sc.*; Spittle, J. T., O.B.E., M.A., † Mech. Sc., Tutorial Bursar; Whibley, L., M.A., *Classics and Anc. Hist.*; Wynn, H. E., M.A., Dean, *Hist.*

Other Lectrs., etc.: Moriarty, G. P., M.A., *Classics and Hist.*; Thatcher, W. S., M.A., † Econ.; Vulliamy, E. O., M.A., *Mod. Langs.*; Ziegler, C. H., LL.M., *Law*.

**PETERHOUSE OR ST. PETER'S COLLEGE.** Founded 1284. Master—Sir A. W. Ward, Litt.D.

Fellows: Barnes, W. E., D.D. (Prof. of Div.); Clayton, G. H., M.A., † Theol.; Dewar, Sir James, M.A., F.R.S. (Prof. of Exp. Philos.); Dickson, J. D. H., M.A.; Edwards, H. J., M.A., C.B., C.B.E., † *Classics*; Francis, E. C., B.A., † *Maths.*; Gillett, C. S., M.A., † Theol., Dean; Lubbock, R., M.A., † Mech. Sc., Junior Bursar and Steward; Temperley, H. W. V., M.A., O.B.E., Asst. Tutor, † *Hist.* (Reader in Mod. Hist.); \* Vellacott, P. C., M.A., † *Hist.*; Walker, T. A., M.A., LL.D., Senior Bursar and Librarian, † *Law*.

Other Lectrs., etc.: Bedford, T. G., M.A. Sid., † Nat. Sc.; Comber, H. G.,

\* Tutor.

† Director or Supervisor.

M.A., † Med. Langs. ; Henderson, H. D., M.A., † Econ. ; Pennell, V. C., M.A., † Med. ; Willey, B., B.A., † Engl. ; Winfield, P. H., LL.D., † Law ; Wright, C. W. B., M.A., † Agric.

QUEENS' COLLEGE. Founded 1448. President—T. C. Fitzpatrick, D.D., † Nat. Sc.

Fellows : Browne, A. D., M.A., Bursar, † Mech. Sc. ; Cook, A. B., M.A., *Classics* (Reader in Class. Archæol.) ; \* Gray, J. H., M.A., *Classics* ; Kennett, R. H., D.D., Prof. of Hebrew ; Laffan, R. G. D., M.A., *Engl. Hist. and Lit.*, † Hist. ; Munro, A., M.A., Bursar and Steward, *Maths.* ; \* Sleeman, C. M., M.A., † Nat. Sc. ; Wood, C. T., M.A., Dean, *Div. and Hebrew* ; \* Wright, A., D.D., Vice-President.

Other Directors of Studies, etc. : Momber, R. M. S. T., M.A., † Mod. Langs. ; Carr, F., LL.D., † Law ; Plaistowe, F. G., M.A., Librarian.

ST. CATHARINE'S COLLEGE. Founded 1473. Master—The Rt. Rev. T. W. Drury, D.D., † *Theol.*

Fellows : Biffen, R. H., M.A., F.R.S., Prof. of Agric. Bot. ; Carr, E. T. S., M.A. ; Chaytor, H. J., M.A., Asst. Tutor, Dean, and Librarian, † *Mod. Langs.* ; Jones, W. H. S., M.A., Bursar and Steward, † *Class., Theol. and Anc. Hist.* ; Newman, L. F., M.A., † *Agric. and Nat. Sc.* ; Portway, D., M.A., † *Mech. Sc.* ; \* Rushmore, F. M., M.A., President, † *Hist.* ; Withers, J. J., C.B.E., M.A.

Other Lectrs., etc. : Alston, L., M.A. † Econ. ; Carr, F., LL.D., † Law ; Fox, C., M.A., † Mor. Sc. ; Munro, A., M.A., † *Maths.* ; Perrett, G. B., M.A., † *Hist.* ; Roderick, H. B., M.D., M.Ch., † Med. ; Tillyard, E. M. W., M.A., † Engl. ; Steers, J. A., B.A., † Geog.

ST. JOHN'S COLLEGE (1511). Master—R. F. Scott, M.A.

Fellows : Appleton, E. V., M.A., † Mineral. ; \* Armitage, B. W. F., M.A., † *Nat. Sc. and Med.* ; Baker, H. F., Sc.D., F.R.S., Prof. of Astron. ; Bartlett, F. C., M.A., † Mor. Sc. ; \* Benians, E. A., M.A., † *Hist.* ; Bennett, G. M., M.A. ; Blackman, F. F., M.A., F.R.S. ; Bonney, T. G., B.D., Sc.D., F.R.S. ; Briggs, G. E., M.A., † Botany ; Bromwich, T. J. I'A., Sc.D., F.R.S., *Maths.* ; Bruford, W. H., M.A. ; Campbell, A. Y., M.A., *Classics* ; Coulton, G. G., M.A. ; † Cox, W. A., M.A. ; Creed, J. M., M.A., Dean, † *Theol.* ; Cunningham, E., M.A., Tutorial Bursar, † \* *Maths.* ; Engledow, F. L., M.A., † *Agric.* ; Foxwell, H. S., M.A., † Econ. ; Glover, T. R., M.A., *Classics* ; Greaves, W. H. M., B.A. ; Harker, A., M.A., F.R.S., F.G.S. ; Heitland, W. E., M.A. ; Jeffreys, H., M.A. ; Larmor, Sir Joseph, Sc.D., F.R.S., M.P., Prof. of *Maths.* ; Leathem, J. G., Sc.D., Senior Bursar ; Lees, S., M.A. ; Liveing, G. D., Sc.D., F.R.S., President ; MacAlister, Sir Donald, M.A., M.D., K.C.B. ; Mills, E. H. F., M.A. ; Marr, J. E., Sc.D., F.R.S., Prof. of Geol. ; Palmer, W. G., M.A., † Chem. ; † Prior, O. H. P., M.A., Prof. of French ; Rapson, E. J., M.A., Prof. of *Sansk.* ; Root-ham, C. B., Mus.Doc., Organist, † *Music* ; Shore, L. E., O.B.E., M.D., † Med., *Physiol.* ; \* Sikes, E. E., M.A., † *Classics* ; Stevens, A. J., M.A. ; Tanner, J. R., Litt.D., † Hist. ; Wagstaff, J. E. P., M.A. ; Ward, J. T., M.A. ; Webb, R. R., M.A. ; White, F. P., M.A., *Maths.* ; Wilson, J. T., M.A., Prof. of Anat. ; Winfield, P. H., LL.D., † Law ; Wordie, J. M., M.A., † Geog. ; Yule, G. U., M.A.

Other Lectrs., etc. : Brindley, H. H., M.A., Steward, † Biol. ; Lister, J. J., M.A., F.R.S., † Zool. ; Peake, A. H., M.A., † *Mech. Sc.* ; Charlesworth, M. C., B.A., *Classics* ; Bennett, H. S., B.A., † Engl. ; Girdlestone, C. M., B.A., † Mod. and Med. Langs. ; Woods, H., M.A., F.R.S., † Geol. ; Rolleston, Sir H., K.C.B., *Physic* (Linacre) ; Previté-Orton, C. W., M.A., Librarian.

\* Tutor.

† Director or Supervisor.

‡ Ob. Jan. 6, 1923.

SIDNEY SUSSEX COLLEGE. Founded 1596. Master—\* G. A. Weekes, M.A.

Fellows: Edwards, G. M., M.A.; Hackforth, R., M.A., *Classics*, Prælector; \* Knox-Shaw, T., M.A., *Maths.*; McNeile, A. H., M.A., D.D.; Mayall, R. H. D., M.A., *Maths.*; Passant, E. J., M.A., *Hist.*, Steward; Pope, Sir W. J., K.B.E., M.A., F.R.S., Prof. of Chem.; Robson, H. C., M.A., Bursar; Smith, B. T. D., M.A., *Theol.*, Dean; Thacker, C. R. A., M.A., M.D., B.Ch., † *Nat. Sc.*, † Biol. and Med.; Wilson, C. T. R., M.A., F.R.S. (Reader in Elec. Meteorol.).

Other Directors of Studies: Mills, W. H., M.A. Jes., Chem.; Petherbridge, F. R., M.A., Agric.; Wheatcroft, W. H., LL.D. Down., Law; Brooks, F. T., M.A. Bot.; Debenham, F., M.A., Geog.; Lyon, T. H., M.A. Corp., Archit.; Portway, D., M.A. Cath., Mech. Sc.; Thatcher, W. S., M.A., Econ.; King, W. B. R., M.A., Geol.

TRINITY COLLEGE. Founded 1546. Master—Sir Joseph J. Thomson, M.A., O.M., Pres.R.S. (Prof. of Expl. Physics).

Fellows: Adam, N. K., M.A.; Adrian, E. D., M.A., M.D., † Med. Studies, *Nat. Sc.*; Aston, F. W., M.A., F.R.S.; Ball, W. W. R., M.A.; Bevan, A. A., M.A., *Oriental Langs.*; Boughey, A. H. F., M.A.; Burnaby, J., M.A., Junr. Bursar and Steward; Butler, J. R. M., O.B.E., M.V.O., M.A., *Hist.*, Junr. Dean; Buxton, P. A., M.A.; Capstick, J. W., M.A., O.B.E.; Cornford, F. M., M.A., *Classics*; Duff, J. D., M.A.; \* Dykes, F. J., M.A., *Mech. Sciences*; Eddington, A. S., M.A., F.R.S., Prof. of *Astron.*; Ellis, C. D., B.A., *Nat. Sc.*; Fletcher, Sir Walter M., M.A., M.D., Sc.D., K.B.E., F.R.S.; Fowler, R. H., O.B.E., M.A., *Maths.*; Frazer, Sir J. G., M.A., F.R.S. *Anthrop.*; Glaisher, J. W. L., Sc.D., F.R.S.; Glazebrook, Sir Richard T., M.A., K.C.B., F.R.S.; Glauert, H., M.A.; \* Harrison, E., M.A., *Classics*; Henry, D. C., M.A.; Herman, R. A., M.A.; Hicks, R. D., M.A.; Holland, H. A., O.B.E., M.A., LL.M., *Law* (Reader in Engl. Law); Hopkins, F. G., M.A., F.R.S., Prof. of *Bio-Chem.*; Housman, A. E., M.A., Prof. of Latin; Innes, H. McL., M.A., Senior Bursar; Jenkinson, F. J. H., M.A.; Kirkpatrick, Very Rev. A. F., M.A., D.D.; Langley, J. N., M.A., Sc.D., F.R.S., Prof. of *Physiol.*; \* Lapsley, G. T., M.A., *Hist.*; Laurence, R. V., M.A., *Hist.*; Lenox-Conyngham, Sir G. P., F.R.S., Prælector in *Geodesy*; Littlewood, J. E., M.A., F.R.S., *Maths.*; McTaggart, J. McT. E., Litt.D., *Mor. Sciences*; Marshall, T. H., M.A.; Milne, E. A., M.A.; Newall, H. F., M.A., F.R.S., Prof. of *Astro-Physics*; Nicholas, T. C., M.A., *Nat. Sc.*; Parry, R. St. J., D.D., Vice-Master; Pearson, A. C., Litt.D., Prof. of Greek; Pollard, S., M.A., *Maths.*; Postgate, J. P., M.A., Litt.D., F.B.A.; Proudman, J., M.A.; Pye, D. R., M.A., *Mech. Sc.*; Ritchie, A. D., M.A.; Robertson, D. H., M.A., *Econ.*; Robertson, D. S., M.A., *Classics*; Rutherford, Sir Ernest, M.A., F.R.S., Prof. of Expl. Physics; Schreiner, O. D., M.A.; Sedgwick, R. R., M.A., Simpson, F. A., M.A., Senior Dean, *Hist.*; Stanton, V. H., D.D., Prof. of *Div.*; Stewart, H. F., D.D., Prælector in French; Taylor, G. I., M.A., F.R.S., *Maths.*; Taylor, H. M., M.A., F.R.S.; Tennant, F. R., D.D., *Theol.*; Ward, Jas., M.A., Sc.D., LL.D., Prof. of *Mental Philos. and Logic*; Whetham, W. C. D., M.A., F.R.S., *Nat. Sciences*; Whitehead, A. N., Sc.D., F.R.S.; \* Winstanley, D. A., M.A., *Hist.*

Other Lectrs.: Earle, Col. M., C.M.G., D.S.O., *Mil. Hist.* (Lee Knowles); Winfield, P. H., LL.D., *Law*; de la Mare, W., *Engl. Lit.* (Clark); Broad, C. D., Sc.D., *Philos. of the Sciences* (Turner); Vallette, J., *French*; Turner, Prof. C. H., M.A., *Ecccl. Hist.* (Birkbeck).

TRINITY HALL. Founded 1350. Master—H. Bond, I.L.D., *Law*.

Fellows: Angus, C. F., M.A., Librarian, *Classics*; Bell, W. G., M.A.;

\* Tutor.

† Director or Supervisor.

Campbell, Hon. I. M., M.A., Bursar, † *Agric.*; \* Chase, G. A., M.A., Vice-Master and Dean, *Div.*; Dean, H. R., M.D. Ox.; Hayes, R. A., M.A., *Engin.*; Hopkins, F. L., M.A.; Oliver, D. T., LL.M., *Law*; Potts, F. A., M.A., *Nat. Sc. and Med.*; \* Pym, W. St. J., M.A., † *Hist.*; Rendell, W. R., M.A.; Rideal, E. K., M.B.E., M.A., † *Chem. and Phys.*

SELWYN COLLEGE PUBLIC HOSTEL. Founded 1882. Master—J. O. F. Murray, D.D.

Fellows: \* Borradaile, L. A., M.A., *Nat. Sc.*, † *Med.*; \* Carpenter, S. C., M.A., *Theol.*; \* Jordan, W. E., M.A., Vice-Master, *Classics, Hist.*; Knott, I. C., M.A., Bursar, *Maths.*; Marsh, F. S., M.A., Dean, Librarian, *Theol.*, Perrett, G. B., M.A., *Hist.*; Williams, W. N., M.A., LL.B., *Classics*, † *Law*.

Other Directors of Studies: Stewart, H. F., D.D. Trin., *Mod. and Med. Langs.*; Wood, C., Mus.D. Cai., *Music*.

FITZWILLIAM HALL. Established 1887. Non-collegiate students. Censor—W. F. Reddaway, M.A. Asst. Censor—G. H. Harris, M.A.

Directors of Studies: Barker, J. W., B.A., *Mod. Langs.*; Ezard, E. H., M.A., M.D., *Med.*; The President of Queens', *Nat. Sc.*; Fox, C., M.A., *Mor. Sc.*; Gaskoin, C. J. B., M.A., *Hist.*; Goudy, A. P., M.A., *Russian*; Harris, E. H., M.A., *Theol.*; Hayes, R. A., M.A., *Mech. Sc.*; Heath, S. P., M.A., *Nat. Sc.*; Hughes, H. M., D.D., *Theol.*; Johnson, E. W., B.D., *Theol.*; Joseph, C. G., M.A., *Geog.*; Munsey, S. W. V., B.A., *Agric.*; Oldham, H. Y., M.A., *Geog.*; Purvis, J. E., M.A., *Chem.*; Shepherdson, J. F., M.A., Mus.B., *Music*; Thatcher, F., M.A., Chaplain, Bursar; Thatcher, W. S., M.A., *Econ.*; Vernon Jones, V. S., M.A., *Classics*; Webber, W. J., B.A., *Maths.*; Winfield, P. H., LL.D., *Law*; Wyatt, A. J., M.A., *Mod. Langs.*

### WOMEN'S COLLEGES recognized by the University:

GIRTON COLLEGE. Founded 1860. Mistress—Miss B. S. Phillpotts, D.B.E., Litt.D. Dub.

Directors of Studies and Resident Lectrs.: Janet R. Bacon (*Classics*); Hilda M. R. Murray, M.A. Dub. (*Engl. and Hist. and Compar. Philol.*); Gladys Jones, M.A. N.U.I. (*Hist.*); Frances E. Cave-Browne-Cave, M.A. Dub. (*Maths.*); Kathleen T. B. Butler (*Med. and Mod. Langs.*). Non-resident: Lizzie S. Stebbing (*Moral Sc.*); M. Beatrice Thomas (*Nat. Sc.*).

Bursar and Vice-Mistress—Eleanor M. Allen, M.A. Dub. Librarian and Registrar of the Roll—Ethel S. Fegan. Junior Bursar—Pauline K. Leveson, M.A. Dub. Secy.—Mary Clover, M.A. Dub.

NEWMHAM COLLEGE. Founded 1871. Principal—Miss B. A. Clough.

Vice-Principal and Tutor—A. B. Collier, M.A. Dub. (Old Hall); Tutors—J. P. Strachey, M.A. Dub. (Peile Hall), College Lectr. in *Mod. and Med. Langs.*; M. Steele Smith (Clough Hall), College Lectr. in *Engl.*; E. M. Chrystal, M.A. Edin. (Sidgwick Hall), Junr. Bursar.

Other College Lectrs.: L. M. Swain (*Maths.*); H. Richardson (*Classics*); E. R. Saunders (*Botany*); G. L. Elles, D.Sc. Dub. (*Geol.*); J. M. W. Slater, D.Sc. Lond. (*Chem. and Physics*); A. M. Cooke, M.A. Manc. (*Hist.*); Anna J. Paues, B.A. Dub., Ph.D. Upsala (*English*); Mrs. Robinson (*Econ.*). Bursar—Mrs. Lacy. Registrar of the Roll—E. M. Sharpley.

\* Tutor.

† Director or Supervisor.

## AFFILIATION

The privileges of affiliation are granted, under certain conditions, (a) to members of Affiliated Institns. ; (b) to graduates of other Univs. approved for the purpose. A student fulfilling the required conditions is entitled to either or both of the following privileges, namely : (1) to be exempted from all parts of the Previous examn. ; (2) to reckon the 1st term kept by residence as the 2nd, 3rd, or 4th term of his residence, for the purposes of all provisions respecting the standing of candidates for Tripos examns. or for Degree examns. in Med., Surg., or Music, and respecting the standing of candidates for Honours degrees.

*Universities Affiliated or Approved.* All in the United Kingdom and—Adel., All., Basle, Bish., Bom., Calc., Chicago, Columbia, Cornell, Dartmouth, Harv., Hong-Kong, Illinois, Johns Hopkins, King's (N.S.), McG., McM., Madras, Melb., Mich., Minn., Mt. All., New Bruns., New Z., Panjab, Patna, Penn., Prin., Queen's (Ont.), Queensland, St. Fr. X. (N.S.), S. Africa, Syd., Tasm., Tor., Virg., W. Aust., Western (London, Ont.), Wisc., Yale.

*Other Affiliated Institutions.* St. David's Coll., Lampeter ; St. Edmund's Coll., Old Hall, Ware. *Univ. Colls.*—Wales (Aberystwyth), S. Wales (Cardiff), Nottingham, Southampton, Exeter. *Local Lectures Centres*—Exeter, Leicester, Southport.

## GENERAL INFORMATION

The SENATE, consisting, generally speaking, of all Masters of Arts and Masters of Laws who have retained their membership of the Univ. by the fulfilment of prescribed formalities and payment of proper dues, has full power to legislate for the Univ. subject to the Univ. Statutes, and allows degrees, appoints most of the Univ. officers, and elects the 2 members who represent the Univ. in the House of Commons.

The executive authority of the Univ. rests in theory with the Chancellor, but as he is by custom a non-resident officer, it devolves in practice upon his deputy, the Vice-Chancellor, who is appointed every year from among the Heads of Colleges. With the Vice-Chancellor is associated a Council of 16 members known as the *Council of the Senate*, which is elected under certain restrictions by (practically) the resident part of the Senate—known as the *Electoral Roll*. This Council, besides its executive position, has also an important position in respect of legislation, as no Grace can be put to the Senate unless it has first received the sanction of the Council. The Univ. appoints *Syndicates* to administer various departments of Univ. business and *Special Boards of Studies* to superintend Univ. teaching and examns. in the various subjects of study. The system of teaching as a whole is under the supervision of a *General Board of Studies*, on which all the more important subjects of study are represented. All proposals involving the spending of money are submitted by the Council to the *Financial Board*.

The COLLEGES are corporate bodies distinct from the Univ. They possess and manage their own property ; they are self-governing and elect their own officers ; and for nearly all purposes they are independent of Univ. control. The connexion between them and the Univ., however, is of the most intimate kind. The Univ. is in part supported by contributions from them, and without any formal agreement to that effect the Univ. and the Colls. do as a matter of fact recognize each other's regulations. Nearly all the members of the Univ. belong to the Colls., and all the members of the Colls. belong to the Univ. The work of teaching is divided between the Univ. Profs., Lectrs., etc., and the more numerous body of College Lectrs.

MATRICULATION is effected by signing in a register following upon admission as a member of a Coll. or as a Non-Collegiate student; the Univ. does not require any examn. to be passed before Matricn., but an applicant for admission to a Coll. must, in general, satisfy its authorities by passing the Coll. Entrance examn. or otherwise that his attainments are sufficient to enable him to pass the Univ. examns. in due course, and ultimately to proceed to a degree. In effect the *Previous* examn. (v. *infra*) takes the place of the Matricn. examn. of other Univs.

For admission as a member of a Coll. or as a Non-Coll. student application should be made to the proper officer, namely, the Senior Tutor, Christ's, Cai., St. John's; the Tutor, Clare, Cath., Corp., Down., Magd., Pet., Sid.; one of the Tutors, Trin. or Trin. H.; the Provost or Tutor, King's; the President, Queens'; the Bursar, Selwyn; the Master of any of the other Colls.; the Censor, Fitzwilliam Hall (Non-Coll. students). It is important for those who wish to have rooms in Coll. to apply for admission a long time beforehand.

As regards *Colonial and Foreign students*, see Appendix XXIII.

ADMISSION TO ADVANCED STANDING, v. *supra*—AFFILIATION.

INCORPORATION. Students who before admission as members of this Univ. have kept terms by *bona fide* residence at Ox. or Dub. are, subject to certain provisos, allowed terms corresponding to those which they have so kept; a graduate of Ox. or Dub. who took a degree or degrees after having duly qualified himself therefor not only by having passed the examns., etc., required, but by having kept his terms by residence in his own Univ., may be admitted on certain conditions to the same degree or degrees in Camb.

TERMS. In order that a term may be counted towards qualifying for a degree, a student must reside in Cambridge (*i.e.* within a circle of  $2\frac{1}{2}$  miles' radius from Gt. St. Mary's Church) during three-fourths of the term.

DEGREES. B.A., M.A., M.Litt., Litt.D., M.Sc., Sc.D.; B.D., D.D.; LL.B., LL.M., LL.D.; M.B. and B.Ch., M.Ch., M.D.; Mus.B., Mus.M., Mus.D.; Ph.D.

ARTS. The qualifications for the B.A., except for *Research students* (v. *infra*), are: (i.) 9 terms' residence; (ii.) passing or being exempted from the *Previous* examn.; (iii.) passing the examns. for the ordinary degree or a Tripos examn.; (iv.) (for the ordinary degree) a certificate of diligent study.

Exemption from (i.) to the extent of 3 terms can be obtained by students entitled to the privileges of *affiliation* (v. *supra*).

(ii.) The *Previous* examn. consists mainly of Latin, one other language, Maths., and English. Subject to certain provisos, natives of Asia or Africa who are not of European parentage may substitute papers in Arabic, Chinese, Sansk., or Pali for the Latin papers.

Exemption from (ii.) can be obtained by students who hold certain certifs. granted by various Univs. of the U.K., or by the Scotch Education Dept., or by certain Australasian, S. African and European authorities (v. App. XXIII.); such exemption is also granted to students entitled to the privileges of *affiliation*.

As regards (iii.), the ordinary B.A. is obtained by qualifying in 5 subjects of which 3 at least must be "principal" and 1 at least must be chosen from each of 2 groups. The principal subjects are—in Group I.: Bible, Church Hist., Engl., Gk., Lat., Fr., Ital., Span., Ger., Rus., Geog., Hist. I., Hist. II., Econ. I., Econ. II., Moral Philos., Psych., Law I., Law II., Educn., Music, Mily. Subjects I., History of Art; in Group II.: Prelim. in Sc., Maths., Physics, Chem., Applied Chem., Metal., Bot., Zool., Physiol., Geol., Geog., Engin. I., Engin. II., Mily. Subjects II. There are 4 subsidiary subjects in each group.

Students of *Agriculture* and allied subjects may proceed to the ordinary

B.A. by means of certain courses dealing with their scientific and practical sides, and including also prescribed literary training.

The Honours B.A. is obtained by passing in the following Triposes: Anthropol., Classical, Economics, English, Geog., Hist., Law, Maths., Mech. Sciences, Med. and Mod. Langs., Mor. Sc., Nat. Sc., Oriental Langs., Theol.

A Bachelor may be admitted *Inceptor* in Arts at the end of six years from the end of his 1st term, provided that not less than 2 yrs. have elapsed from his *inauguration* (which occurs on Dec. 24 following admission to the title of a degree). The *Inceptor* is *created* M.A. at the end of the following Easter term.

**DIVINITY.** A M.A. or LL.M. proceeds to the B.D. on or after the 11th of June in the 7th year from his *creation*, either (1) by submitting an original dissertation composed by himself in Latin or English on some subject connected with Biblical Criticism, Exegesis, or History, or with the Evidences of Christianity, or with Dogmatic Theology, or with the study of other Religions in relation to the Christian Religion, or with Ecclesiastical History, Literature, or Antiquities, or with the Philosophy of Religion, or (2) by specifying his published works on one or more of these subjects. He is required to satisfy the Degree Committee, either by his Dissertation, etc., or otherwise, that he possesses a competent knowledge of Christian Theology. A B.D. of 5 yrs.' standing proceeds to the D.D. by submitting published works or a printed dissertation on the same subjects as those for the B.D.

**LAW.** A student who has kept 9 terms and obtained Honours in both parts of the Law Tripos or Honours in some other Tripos and subsequently Honours in either part of the Law Tripos is entitled to proceed to the degree of B.A. To qualify for the LL.B. it is necessary to pass the LL.B. examn. after having kept 9 terms and obtained honours in Pt. I. or Pt. II. of the Law Tripos, or passed in either Part at the Honours standard, or taken the degree of B.A. and qualified for practice as a barrister or solicitor in England or Ireland, or as an advocate or law agent in Scotland. A LL.B. who has fulfilled certain conditions may be admitted *Inceptor* in Law at the end of 6 yrs. from the end of his 1st term, provided that not less than 2 yrs. have elapsed from his *inauguration*. A M.A. who has fulfilled these conditions may also be admitted *Inceptor* in Law. A LL.M. who makes an original contribution to the advancement of the science or study of Law may be admitted LL.D. 5 yrs. after *creation*.

**MEDICINE.** The qualifications for the M.B. and B.Ch. are: (i.) 9 terms' residence; (ii.) passing (or exemption from) the *Previous* examn. (v. *supra*); (iii.) 5 yrs.' Medical study; (iv.) passing in due order 3 examns. and presenting an approved thesis. Admission to the 2nd M.B. examn. is conditional on proof of diligent attendance on prescribed courses of lectures and practical work. Admission to the 3rd M.B. is conditional on proof of 3 yrs. of hospl. practice, 5 yrs.' Medical study, and diligent attendance on prescribed courses of instruction and practical work. A M.B. in the 9th term after *inauguration* (v. *supra*) and a M.A. in the 12th after *creation* may be admitted M.D. on submission of a thesis or dissertation, but the M.A. must have attended lectures and hospl. practice and passed examns. as required for the M.B. A B.Ch. after 3 yrs. from *inauguration* may be admitted *Inceptor* in Surgery and so by *creation* to the M.Ch. degree. A M.A. may be admitted also if legally qualified to practise Surgery. A candidate for the M.Ch. must either pass the examn. for the degree or be exempted therefrom in consideration of a contribution to the advancement of the Science or Art of Surgery. Addenbrooke's Hospl., containing 192 beds and large out-patient depts., is available for clinics.



**Musrc.** The qualifications for the Mus.B. include (i.) 9 terms' residence; (ii.) passing (or exemption from) the *Previous* examn.; (iii.) passing an examn. in two parts whereof the first may not be taken before the 2nd term, nor the 2nd before the 8th term. The Mus.M. may be taken after at least 3 yrs. have elapsed since *inauguration* (v. *supra*) as Mus.B. and after passing the prescribed examn.

Persons not less than thirty years of age who have graduated in some Faculty of the Univ. and given proofs of distinction in musical composition may be candidates for the Mus.D.

**The Sc.D. and Litt.D.** Any person may be a candidate for either degree who is a M.A., LL.M., or M.Ch. of not less than 5 yrs.' standing or a M.B. of not less than 7. These degrees are granted in consideration of original contributions to the advancement of Science or Learning.

**DIPLOMAS.** In addition to degrees, which are for the most part conferred only on its own members, the Univ. grants 5 Diplomas which are open to other persons—in Geog., in Psych. Med., in Pub. Health, in Med. Radiology and Electrology, and in Tropical Med. and Hygiene—and 8 which are almost entirely restricted to members of the Univ.—in Agric., Anthropol., Class. Archæol., Education, Forestry, Horticulture, Hygiene, and Oriental Languages, the diplomas in Anthropol. and Orient. Langs. being open to non-members in certain exceptional circumstances only. Among overseas Mental Hospitals recognized for clinical work for the Dip. Psych. Med. are the Pretoria and the Gladesville (Sydney). *Certificates*, open to members of the Univ. only, are conferred in Architecture (open to graduates only) and in certain foreign languages. A *Divinity Testimonium* is granted on proof of diligent attendance at 6 courses of lectures.

The Diploma in Hygiene, established in 1921 in response to a communication from the League of Red Cross Societies at Geneva, is intended for *foreigners* who possess a qualification to practise medicine or surgery which, though not registrable in Great Britain, is recognized by the authorities of their own countries. The full course must extend over 9 months. The requirements are similar to those demanded for the English D.P.H. except that no detailed knowledge of English public health laws is required.

The Univ. makes provision for the training of candidates for the Higher CIVIL SERVICES; Student Interpreters; Indian Civil Service selected candidates; candidates for administrative appointments in Tropical Africa and other branches of the Civil Service and for service under the Govts. of Egypt and the Sudan. To meet the wants of Civil Service candidates a series of lectures supplementary to the courses for regular Tripos candidates has been arranged by the Board of I.C.S. Studies, and by a Committee of Associated Colls. Detailed information may be obtained from the Director of Civil Service Studies, appointed by this Committee (G. P. Moriarty, M.A., 1 Mill Lane), and from H. A. Roberts, M.A., Univ. Offices, St. Andrew's St., who is Secy. to the Board of I.C.S. Studies, to the Foreign Service Students Committee, and to the Appointments Board.

A system of MILITARY INSTRUCTION has also been organized by the Univ. The Board of Milit. Studies (Secy.—Hon. I. M. Campbell, D.S.O., Trin. H.) are in direct communication with the War Office and responsible for the nomination of Camb. Univ. candidates for Regular commissions in H.M. Forces.

The TRAINING OF TEACHERS is under the management of the Teachers Training Syndicate, established in 1878 (Secy.—F. E. E. Harvey, M.A.; address—Warkworth House).

Examns. for the Univ.'s *Certificate of Proficiency*, held in June and Dec., are open to students of certain colleges, and to teachers who have had at least a year's experience in an approved Secondary School, if their attainments are satisfactory.

Students of the *University Training College* (Principal—C. Fox, M.A., Chr.; address—Warkworth House) devote their first 3 yrs. to reading for the B.A. degree, the 4th to professional training. Several scholarships and exhibitions are offered to intending schoolmasters who have been Bursars, Student Teachers, or Pupil Teachers.

There is also a Post-graduate Training Coll. for Women. Principal—Miss M. H. Wood, M.A. Lond., Litt.D. Dub., Girton; address—Wollaston Rd.

Candidates are trained for HOLY ORDERS at Ridley Hall, founded in 1879 (Principal—A. J. Tait, D.D. Joh.); or at the Clergy Training School, Westcott House, founded in 1881 (Principal—Rev. Canon B. K. Cunningham, M.A. Trin.). These and other similar institns.—the Westminster Coll., founded 1844 (Principal—J. Skinner, D.D. Aberd., M.A. Joh., Presbyterian); Cheshunt Coll., founded 1768 (Resident Tutor—Rev. E. W. Johnson, B.D., Undenominational); and St. Edmund's House, founded in 1896 (Principal—Rev. T. F. McNulty, M.A., Roman Catholic)—are not directly or definitely concerned or connected with the Univ. Cheshunt and Westminster Colleges were moved from Cheshunt and London in 1905 and 1899 respectively.

**RESEARCH STUDENTS.** Each application for admission must be accompanied by (i.) a diploma or other certif. of graduation at a Univ.; (ii.) a statement as to the course of research which the applicant desires to pursue, together with evidence of qualification, attainments, and previous study; (iii.) a certif. or declaration that the applicant has attained the age of 21 yrs. In exceptional cases requirement No. (i.) may be dispensed with. The application is not granted unless it appears (a) that the course of research can conveniently be pursued within the Univ., and (b) that the applicant has produced adequate evidence that he is qualified to enter upon the proposed course.

A Research student pursues his course under direction and supervision, prescribed by the Degree Committee of the Special Board of Studies concerned. If he wishes to obtain a degree elsewhere he may, after he has pursued his studies in the Univ. for not less than 2 terms with regularity and industry, receive a *Certificate* to that effect signed by the V.C. After a course extending over 2 yrs. and residence in the Univ. for at least 6 terms (Cambridge graduates, 3 terms) after admission as research students, the M.Sc. or M.Litt. may be obtained. For the Ph.D. (v. p. 15) 3 yrs. are ordinarily required including 2 (in special cases 1) in the Univ. In exceptional cases a course extending over 2 yrs. instead of 3 may be accepted.

**UNIVERSITY SCHOLARSHIPS** open to graduates number about 57, and are worth about £5600 p.a. In almost every instance they are open only to persons who have graduated in or are members of this Univ., and in some cases only to those who have kept a certain number of terms. For details see *Students' Handbook* (price 7s. 6d., Univ. Press), which also gives details of *Entrance Scholarships*.

**APPOINTMENTS.** (1) The University Appointments Board is concerned with appointments of all kinds (Secy.—H. A. Roberts, M.A., Univ. Offices); (2) the Scholastic Agency is concerned with scholastic appointments only (Director—Prof. W. J. Lewis; office at Mineralogical Museum).

**ADVISER OF INDIAN STUDENTS:** W. S. Thatcher, M.A., Fitzwilliam Hall.

**WOMEN.** From 1872 women were informally admitted to Tripos examns. in the Univ., and from 1881 have been formally admitted to the *Previous examn.*, the Tripos examns., and certain examns. in Med. and Music. They were subsequently admitted to the courses and examns. for the Diplomas in Agric., Horticulture, Forestry, and Geog., and for the Training of Teachers, and were made eligible for Certifs. of Research. Finally in Oct. 1921 a Grace admitting them to titular degrees was passed. Women students must reside either at Girton or at Newnham or within the precincts of the Univ. under the Regulations of one or other of these colleges.

The **UNIVERSITY LIBRARY** contains over 900,000 vols., including many early printed books, and over 10,000 MSS. and 100,000 maps. It is entitled under the Copyright Act to a copy of every book published in the U.K., and a large number of foreign books and periodicals are acquired by purchase. Each Coll. and Pub. Hostel has a library. Some are interesting survivals of mediæval rooms kept in the state in which they were originally arranged. There are also many departmental libraries, such as the Class. Archæol.; the Seeley Memorial (works on Hist. and Comp. Politics originally collected by John Symonds, Regius Prof. of Mod. Hist. from 1771 to 1807, and added to by his successors); Economics; Law (Squire Law Library); Mod. Langs.; Moral Sciences; Bendall (Sanskrit, etc.); Pathological School; Music collections in the Fitzwilliam Museum and Museum of Archæol.; Conchol. and Ornithol. (in Museum of Zool.); Robertson Smith (Oriental books); Selwyn Div. School. The Library of the Philos. Soc. maintains a special relation to all the Scientific Depts. and is very rich in sets of Journals and Scientific Transactions. The Balfour Library contains a large collection of books and periodicals on biological subjects.

**MUSEUMS of Art and Archæology.** The Fitzwilliam (Director and Marlay Curator—S. C. Cockerell, M.A.) contains a large and valuable collection of paintings, drawings, engravings, Egyptian and Greek antiquities, ceramics, coins, illustrated MSS., autographs and early printed books; the Museum of Class. Archæol. (Curator—A. B. Cook, M.A. Qu.) contains a collection of casts illustrating the history of Greek sculpture.

The Museum of Ethnol. and Archæol. (Curator—A. C. Haddon, Sc.D., acting) has a large and increasing collection, including Saxon urns and ornaments, casts of Central American monuments, Egyptian stone implements, unique Fijian collection, and numerous others resulting from scientific expeditions by Cambridge men.

The "Museums of Science" include museums, laboratories, lecture-rooms, class-rooms, and workshops for Agric., Bio-Chem., Bot., Chem., Engin. (including Engine-room, Elasticity, Elec., and Hydraulic Labs., and drawing office), Exper. Physics, Hum. Anat., Ethnol., Forestry, Medicine, Mineralogy (collection very largely increased in recent years and one of the best in the country), Physiol., Psychol., Zool. and Comp. Anat. The Zool. Lab., in addition to providing for the ordinary work of the Dept. and for research, affords peculiar facilities for the study of diseases of animals and of economic entomology. The Museum of Zool. includes very complete series of vertebrates and invertebrates, the fishes obtained by Charles Darwin during the voyage of H.M.S. *Beagle*, a series of invertebrata from Naples, valuable collection of Polyzoa, extensive collection of marine animals from Pacific and Indian Oceans, and an important collection illustrating heredity, protective resemblance, and mimicry (Supt.—C. F. Cooper, M.A. Trin.; Strickland Curator (Birds)—H. Gadow, M.A., F.R.S. (King's); Curator in Entom.—H. Scott, Sc.D. Trin.]. The Sedgwick Museum of Geol. includes a fine collection of

British and foreign building stones lately added to the Economic section. In addition to the labs. of the School of Agric. there are Field Labs. covering about 10 acres, provided by means of Govt. grants for an Inst. for Research in Animal Nutrition; also a Univ. Farm of 200 acres and Plant-breeding Farm of 230 acres. The Botanic Garden has excellent facilities for study. The Molteno Institute for research in Parasitology, and a Low Temperature Station for research in Bio-Chemistry and Bio-Physics were established in 1921.

The OBSERVATORY (Director—Plumian Prof. of Astr.), about a mile from Cambridge, has a meridian circle of  $8\frac{1}{4}$  in. aperture; the Northumberland equatorial 12 in. aperture; the Sheepshanks photographic equatorial  $12\frac{1}{4}$  in.; a number of smaller instruments, and a good library. The Solar Physics Observatory standing close to the older Obs. has the Newall telescope (25 in.), McClean coelostat and spectrograph, Huggins telescopes, etc. The Univ. has taken over charge (for the Govt.) of the Solar Physics Obs. formerly at South Kensington, receiving a grant-in-aid.

The CAMBRIDGE LOCAL EXAMINATIONS, instituted in 1858, are conducted at various places throughout the country and in the Colonies. Copies of the Regns. regarding the Junr. Local and School and Higher School Certificate examns. and the examns. (designed for teachers of not less than 20 yrs. of age) for Certifs. of Proficiency in Religious Knowledge and in English, may be obtained from the Secy. for Local Examns., Syndicate Buildings.

UNIVERSITY EXTENSION Lectures are delivered and classes in connexion with them held by a staff of about 25 itinerant lecturers in various towns in different parts of England, including places so distant as Southport, Newcastle, Gt. Yarmouth, and Exeter, under a system initiated in Cambridge in 1873. The characteristic features of the method of teaching adopted are (i) the Lecture presenting the subject in broad outline, (ii.) the Class, held for about an hour before or after the lecture, at which questions are given out by the lectr., (iii.) the short essays written on these questions, and (iv.) the examn. The grades of certifs. are: *Terminal*, awarded after a course of ordinarily 12 lectures; *Sessional*, for courses extending over not more than 2 yrs. and including at least 22 lectures; the *Vice-Chancellor's*, awarded to students who obtain Terminal or Sessional certifs. satisfying certain conditions and submit a satisfactory essay; and *Affiliation* certif., obtainable only at affiliated centres (Exeter, Leicester, and Southport) under special conditions. A *Travelling Library* is provided by the Syndicate for each course. The work is under the management of the Local Examns. and Lectures Syndicate, and full particulars can be obtained from the Secy. for Lectures, Syndicate Buildings (Rev. D. H. S. Cranage, Litt.D.).

TUTORIAL CLASSES have been instituted in connexion with the Workers' Educational Asscn. They are in each case limited to about 30 members, most of whom are working men and women, who pledge themselves to attend the 24 lectures and classes provided in each session and to write essays. The course covers at least 3 yrs. The classes are managed by a Committee appointed by the Syndicate, consisting of 6 resident members of the Senate and 6 representatives nominated by the W.E.A.

PUBLICATIONS. The *Camb. Univ. Reporter*, weekly during term, 3d. a copy, terminal subs. 2s. 6d., or by post 4s. 6d.; *Ordinances*, 1920 (fresh editions every 3 or 4 yrs., with suppts. in intervening years); *The Students' Handbook*, annually in July, 7s. 6d.; *Facilities for Graduate Study and Research*, 1922; *Compendium of Univ. Regns.*, 9d.; *The Statutes of the Univ.*, with some Acts of Parlt.,

## CAMBRIDGE

7s. 6d.; *Endowments of the Univ. of Camb.*, 1904; *Alumni Cantabrigie* (to 1751), Ed. J. and J. A. Venn, vol. i. (Abbas-Cutts); *Matricns. and Degre* (a list of all those who have entered the Univ.; 1544-1659, 1850-1901-1912); the *Calendar*, annually, 15s., Press; the *Historical Regist* *Historical Register Supplement*, 1911-20, and *Index to Tripos Lists*, 1748-1911 *Histories*: (a) *Annals of Camb.*, by C. H. Cooper (5 vols.); (b) *The Univ. Camb.*, by J. B. Mullinger (3 vols.); (c) *College Histories*—Robinson's Series various authors; Dent's Series—King's, St. John's, Trinity, 2s. each *Magazines*: *The Camb. Review*, the *Granta*, the *Old Cambridge*, the *N. Cambridge*, weekly during term.

EXPENSES. V. p. 179.

## THE YEAR 1921-22

**BENEFACTIONS.** A visiting fellowship tenable at Princeton University, U.S.A. Rayleigh Memorial Fund, £700 for Cavendish Laboratory Library; Sir E. Mo memorial prize in Engineering; S. G. Perceval, bequest of pictures, book etc., and residue of estate, worth about £400 p.a., for Fitzwilliam Museum W. W. Rouse Ball, £500 for mathematical lectureship; M. Embiricos, £500 for Readership in Modern Greek; Royal Agric. Society, £250 p.a. (provisional for investigation).

**NEW POSTS.** University Readers in Geodesy, in Electrical Engineering and in French; Master of the School of Architecture.

Among CHANGES in REGULATIONS were: New regulations for the Anthropological, Law, and Modern and Mediæval Languages Triposes, and the Diploma in Education; Mathematics introduced as a subject for the Natural Science Tripos, Pt. I.; Roman-Dutch Law introduced as alternative to English Legal History or Jurisprudence in Pt. II. of the Law Tripos; conditions for the LL.B. degree made more exacting; regns. for the LL.D. assimilated to those for D.Sc. and D.Litt.

**OTHER IMPORTANT OCCURRENCES.** Opening of Molteno Institute of Parasitology; inauguration of Low Temperature Station for research in bio-chemistry and bio-physics; Royal Agricultural Society's Show; proposal of a scheme of Pensions on a contributory basis for Univ. servants; approval of proposals for building new library.

**FOREIGN VISITORS** who gave lectures: P. Hazard of the Sorbonne, Nie Bohr of Copenhagen, Paul Radin of California, A. T. Hadley of Yale, Roscoe Pound of Harvard, W. R. Shepherd of Columbia, R. G. Lévy of Paris, Jaroslav Cesar, D. Subotić, M. Michaescu.

**DEATHS.** Sir J. E. Sandys, July 6<sup>th</sup>; Sir G. Sims Woodhead, Dec. 29. W. H. Rivers, June 4; Sir G. W. Prothero, July 10; A. R. Waller, July 15. J. M. Dodds, Nov. 13. *Retirements*: V. H. Stanton, C. S. Myers, Baron A. von Hügel.

**NUMBER OF STUDENTS.** Michaelmas 1922. Undergraduates in residence 4540. Research students, 141. Women students at Girton, 184; Newnham 261. Of the Research students 24 were from Indian Univs., 11 from Canadian, 7 from Australasian, 2 from S. African, 14 from Univs. of the U.S.A., 4 from European, 2 from Japanese; their fields of research were chiefly in Physics (22), Chemistry (15), History (13), Botany (12), English (11), Bio-chemistry (9).

**HONORARY DEGREES CONFERRED.** D.D.—H. C. Lees, T. A. Scott, G. W. Blenkin, B. Lasbrey, P. M. Herbert, A. B. L. Karney, C. L. Carr, H. W. F. Mowll; LL.D.—R. Pound of Harvard, E. H. Parker, H.R.H. The Duke of

York, W. H. Taft, C. R. W. Adeane, Sir G. Greenal, Sir A. D. Hall, E. S. Beaven, A. E. Humphries, E. Mathews, H.R.H. the Duke of Aosta; *Sc.D.*—Baron von Hügel; *M.A.*—Sir G. P. Lenox-Conyngham, H. Stone, Sir A. L. Lynden-Bell, G. P. Hawkins.

OTHER DEGREES. *M.D.*, 12; *Sc.D.* and *Litt.D.*, 6; *Ph.D.*, 9; *B.D.*, 3; *M.Ch.*, 2; *M.A.*, 145; *LL.M.*, 3; *M.Sc.*, 1; *M.B.*, 65; *B.Ch.*, 71; *B.A.*, 1379; *LL.B.*, 110; *Mus.B.*, 1.

DIPLOMAS GRANTED. *Agric.*, 54; *Anthrop.*, 1; *Class. Arch.*, 3; *Forestry*, 13; *Geog.*, 15; *Hortic.*, 1; *Med. Rad. and Elec.*, 24; *Psych. Med.*, 5; *Pub. Health*, 30; *Trop. Med. and Hy.*, 14.

NUMBER OF WOMEN who qualified for the title *B.A.* in 1921. *Maths.*, Pt. I., 24, Pt. II., 8; *Classics*, Pt. I., 11, Pt. II., 8; *Moral Sc.*, Pt. I., 1, Pt. II., 1; *Nat. Sc.*, Pt. I., 25, Pt. II., 7; *Law*, Pt. I., 1; *Hist.*, Pt. I., 20, Pt. II., 17; *Oriental Langs.*, Pt. I., 1, Pt. II., 1; *Med. and Mod. Langs.*, 29; *Mech. Sc.*, 3; *Econ.* Pt. I., 5, Pt. II., 1; *Engl.*, 30; *Geog.*, Pt. I., 6, Pt. II., 1.

APPOINTMENTS BOARD. In the years 1920 and 1921, 695 appointments were obtained on the introduction of the Board. These included lectureships in 14 Univs. or Univ. Colleges, scientific assistantships in 24 firms, engineering appointments under 45 bodies, Agricultural and Forestry appointments under 18 bodies, other posts in 88 firms and industrial organizations.

LOCAL EXAMNS. were held in Dec. 1921 at 265 centres, including 27 in India, 18 in Ceylon, 11 in Straits Settlements and Malay States, 9 in S. and W. Africa, 12 in West Indies. The number of candidates was 12,024. In July 1922 the examns. were held in 300 centres, of which 13 were overseas, and the number of candidates was 9304.

LOCAL LECTURES centres increased from 79 to 80; the number of courses was 92; Final Examn. Certifs., 163; attendances at lectures and classes were 11,721 and 3027. A conference on Univ. Extra-mural Teaching is to be held at Cambridge in July 1923. At the first meeting (June 11, 1921) of the Committee formed by the President of the Board of Education to deal with problems connected with the Adult Education movement in England and Wales, Dr. Parry of Trin. Coll., Cambridge, was elected Vice-Chairman. Dr. Parry has since been appointed Chairman on the resignation of the Bishop of Manchester.

# UNIVERSITY OF DURHAM

VISITOR—THE BISHOP OF DURHAM.

CHANCELLOR—The Rt. Hon. the EARL OF DURHAM, K.G., G.C.V.O.,  
P.C., D.C.L.

VICE-CHANCELLOR—Prof. ARTHUR ROBINSON, M.A., D.C.L.

PRO-VICE-CHANCELLORS—J. S. G. PEMBERTON, M.A., D.C.L. ; Prof.  
Sir DAVID DRUMMOND, C.B.E., M.A., M.D., D.C.L., LL.D. ; Sir  
THEODORE MORISON, K.C.S.I., K.C.I.E., M.A., D.C.L.

PROCTORS—P. J. HEAWOOD, M.A. ; W. N. HAWORTH, Ph.D., D.Sc.

REGISTRAR—H. G. THEODOSIUS, M.A., B. ès L.

LIBRARIAN—E. V. STOCKS, M.A.

## AFFILIATED AND ASSOCIATED COLLEGES

A. Colleges in which students may matriculate, keep terms, and pass examns., and so qualify without coming to England for the B.A., M.A., B.D., D.D., B.C.L., D.C.L., and L.Th. degrees :

CODRINGTON COLLEGE, BARBADOS. Trustees (under the will of Christopher Codrington, who died in 1710)—The Society for the Propagation of the Gospel ; Visitor—The Lord Bishop of Barbados ; Principal—J. C. Wippell, M.A., B.D. ; Prof. of Theology—E. J. Lee, M.A. ; Prof. of Classics—W. W. C. Dunlop, M.A. ; Prof. of Medicine—W. B. Clark, M.B., C.M.

FOURAH BAY COLLEGE, SIERRA LEONE. Founded in 1827 by the Church Missionary Society. In 1918 the Wesleyan Missionary Society became associated with the C.M.S. in the control of the College. Visitor—The Bishop of Sierra Leone ; Principal—F. B. Heiser, M.A. ; Vice-Principal—T. J. Evans, M.A., B.D. 4 Tutors and 2 Lectrs.

B. Ladies' College, Cheltenham ; Queen's College, Harley St., London ; Women's Training Colleges, Darlington and Ripon. Women students of 18 yrs. of age who have completed 2 yrs. of study and examn. at any one of these and passed the First Public Examn. in Arts may be allowed to count 2 yrs. kept at the College as 1 yr. towards the B.A. degree.

C. The following associated Theological Colleges :

St. Aidan's ; St. Augustine's ; Burgh ; Chichester ; Cumbrae ; Dorchester ; Edinburgh ; Highbury ; Jamaica ; St. John's, Armidale, N.S.W. ; Lichfield ; Lincoln ; Moore, Sydney ; Queen's, St. John's, Newfoundland ; Salisbury ; Selwyn, Dunedin ; Truro ; Warminster ; Bishop Wilson School, Isle of Man ; Theol. Depts. of King's Coll., London, and of Queen's Coll., Birmingham.

Students may take in these Colleges courses extending over 3 years, which qualify for the Lic.Theol. Nine terms kept in one of these Colleges, after passing the matricn. examn., may be counted in lieu of 6 of the terms required for the B.A. degree in the case of a student who obtains the Lic.Theol.

## GENERAL INFORMATION

The Univ. was established by Act of Parliament in 1832 and reconstituted in two divisions in 1908. The College of Medicine, founded in 1832, became associated with the Univ. first in 1852 and more closely, as "The University of Durham College of Medicine," in 1870. Armstrong College was founded in 1871 as the Durham College of Physical Science and assumed its present name in 1904.

The Univ. has no teaching staff apart from those of the Durham Colls., the Coll. of Medicine, and Armstrong Coll. The Council of the Durham Colleges, the Coll. of Medicine, and Armstrong Coll. have respectively full power and authority to regulate teaching and discipline, and to provide for the appointment of all their teachers and other officers.

**FACULTIES.** At Durham only—Theology and Music; at Durham and Armstrong—Arts and Letters; at Armstrong only—Science and Commerce; at College of Medicine—Medicine.

**ADMISSION OF STUDENTS FROM OVERSEAS.** The matricn. examns. of Sydney and the S. African Univs. and degrees in Arts of all Univs. of the British Empire are accepted.

**DEGREES.** B.A., M.A., B.Litt. (obsolete), M.Litt., D.Litt.; B.Sc., M.Sc., D.Sc.; B.D., D.D.; B.C.L., D.C.L.; M.B., B.S., M.D., M.S., D.Ch.; B.Hy., D.Hy.; B.Mus., D.Mus.; B.Com., M.Com.; Ph.D. (v. p. 15).

*Diplomas* in Foreign Langs., Arabic, Theol., Psychiatry, Teaching, Public Health; L.D.S., Lic.Theol.

The B.A., B.Sc., or B.Com. may be obtained by a 3 yrs.' undergraduate course. For the 1st yr. of the B.Sc. course equivalent study in another Univ., and for the 1st yr. of the B.Com. course 2 yrs.' attendance as an evening student may be accepted. For the B.Mus. two public examns. must be passed.

For the M.B. and B.S. at least 1 of the 5 yrs. of Med. study must be spent in the Coll. at Newcastle. The B.Hy. is open to graduates in Med. who have spent 1 yr. in professional study at Newcastle.

The B.C.L. may be taken by examn. by a B.A. of 12 terms' standing.

The course for the Diploma in Teaching covers 3 terms after graduation.

The course for the Diploma in Arabic covers 3 terms.

The M.A. is open to a B.A. of 9 terms' standing who obtained 1st or 2nd Class Honours in the Final B.A. examn. or, after passing this examn., has passed the Dipl. Theol., B.D., B.C.L., M.B. or B.Sc., degree examn., or who qualifies by passing a special examn.

The M.Sc. can be obtained by a B.Sc. of 2 yrs.' standing by original work or examn.

The D.Litt. or D.C.L. may be obtained by a B.A. (or B.Litt.) or B.C.L., respectively, of 10 yrs.' standing by a sufficient contribution to learning; the D.Sc. in the 7th year after admission to B.Sc.; the D.Mus. by a B.Mus. of 15 terms' standing.

For the M.D. a candidate must have had 2 yrs. of practice in a hospl. or Mil. or Naval service after graduation as M.B.

For the D.Ch. a candidate must have devoted 3 yrs. (including one at least in the Univ. and 6 months at least abroad), subsequently to having obtained a registrable qualification, to the study of surgery and ancillary subjects.

For the D.Hy. 2 yrs.' experience of Pub. Health administration or research after obtaining the B.Hy. are necessary.

*M.D. Degree Examn. for Practitioners.* A person who has been registered by the Gen. Med. Council of the U.K. and in the active practice of his profession for 15 yrs. as a qualified practitioner and is not less than 40 yrs. of



age may obtain the M.D. degree without fulfilling any conditions as to residence on passing an examn. instituted for this purpose by this Univ. and held in March and June. Candidates who have not passed previously to their professional examn. an examn. in Arts are required to pass an examn. in Classics and Maths. Natives of India are admissible if they bring evidence of having passed within the preceding year an examn. in Latin.

*Degrees, etc., in Theology.* The B.D. examn. is open to candidates of 25 yrs. of age who are graduates in Arts (or Letters) of 2 yrs.' standing; if of another Univ. they must have obtained the Dipl. Theol. of Durham. The Board of the Faculty may admit also non-graduates who keep three terms at Durham and pass the Dipl. examn.

The Lic. in Theol. is open to members of the C. of E. only. Nine terms must be kept at one of the Theol. Colls. in list C above.

The Dipl. in Theol. is obtainable by graduates of a Univ. of the British Empire who keep 3 terms at Durham and pass the Dipl. examn. Residence for a year at an approved Australian Coll. may be accepted in lieu of keeping 3 terms at Durham.

The D.D. is open to a B.D. of Durham who is a Master of Arts of 10 yrs.' standing on submission of a sufficient contribution to learning.

FEES. Matricn., £2. Examns and degrees, £2 to £10.

PUBLICATIONS. *Univ. Calendar* (Oct.), 3s. 6d.; *Durh. Univ. Gazette*, 4s. annually; *Durh. Univ. Journal* (oldest Univ. Mag. in England), once a term, 1s. 6d.

## THE YEAR 1921-22

NEW DEVELOPMENTS. Honour Schools of Fine Art and Archit. Inclusion of Music and Fine Art as subjects in the Arts Pass course. A Department of Educn.

HONORARY DEGREES CONFERRED. D.D.—Rev. C. F. Burney, Right Rev. S. Heaslett. D.C.L.—Rev. R. C. Gillie, Dr. C. J. Martin. D.Litt.—E. K. Chambers, Dr. D. S. Margoliouth. M.A.—R. Blair, A. Chapman, E. Christopher. M.Sc.—J. P. Yorke.

OTHER DEGREES, DIPLOMAS, etc. B.D., 14; M.D., 14; M.S., 3; M.B. and B.S., 51; B.Hy., 2; M.A., 37; B.A., 134; D.Sc., 2; M.Sc., 29; B.Sc., 115; M.Litt., 2; D.Mus., 2; B.Mus., 20; B.Com., 13; Ph.D., 1; L.Th., 46; Dip.Th., 18; L.D.S., 11; D.P.H., 2; D.Th. P.T., 20; Dip. For. Langs., 1.

TUTORIAL CLASSES (W.E.A.) 21.

## DURHAM DIVISION

*President of Council*—J. S. G. PEMBERTON, M.A., D.C.L.

*Secretary of the Council*—C. S. WALLIS, M.A.

*Secretary of Examinations*—A. ROBINSON, M.A., D.C.L.

*Prælector*—E. G. PACE, M.A.

*Treasurer*—F. W. RITSON, M.A.

*Librarian*—E. V. STOCKS, M.A.

### PROFESSORS AND LECTURERS, January 1, 1923

- |                                    |  |                                     |
|------------------------------------|--|-------------------------------------|
| <i>Classics</i>                    |  | Burchnall, J. L., M.C., M.A. Ox.    |
| Cruickshank, A. H., M.A. Ox.,      |  | Lectr.                              |
| D.Litt. (Greek and Class. Lit.)    |  |                                     |
|                                    | Prof.  |                                     |
| How, J. H., M.A. Ox. (Latin)       | Prof.  |                                     |
| Frost, P. R., M.A. Camb.           | Lectr.                                       |                                     |
| Pestle, E. P., M.A.                | Lectr.                                       |                                     |
| <i>Divinity and Eccl. History</i>  |  |                                     |
| Walker, D., M.A., D.D. Ox.         | Prof.  |                                     |
| <i>Divinity</i>                    |  |                                     |
| Pace, E. G., M.A., B.D.            | Reader.                                      |                                     |
| <i>Economics and History</i>       |  |                                     |
| Hood, F. C., M.A. Edin.            | Lectr.                                       |                                     |
| <i>Education and Psychology</i>    |  |                                     |
| Robinson, A., M.A., D.C.L.         | Prof.  |                                     |
| Powell, T. W., M.A.                | Lectr.                                       |                                     |
| <i>English Lang. and Lit.</i>      |  |                                     |
| Ellershaw, H., M.A.                | Prof.  |                                     |
| Colgrave, B., M.A. Camb.           | Lectr.                                       |                                     |
| <i>Hebrew and Oriental Langs.</i>  |  |                                     |
| Guillaume, A., M.A. Ox.            | Prof.  |                                     |
| <i>History</i>                     |  |                                     |
| Whiting, C. E., M.A., B.D., B.C.L. | Reader.                                      |                                     |
|                                    | [Lectr.]                                     |                                     |
| Whiting, C. E., M.A., B.D., B.C.L. |  |                                     |
| Wallis, C. S., M.A.                | Lectr.                                       |                                     |
| <i>Liturgiology</i>                |  | [Lectr.]                            |
| Mouldsdales, S. R. P., M.A., B.D.  |  |                                     |
| <i>Mathematics</i>                 |  |                                     |
| Heawood, P. J., M.A. Ox.           | Prof.  |                                     |
| <i>Military Science</i>            |  |                                     |
| Macfarlane-Grieve, A. A., M.C.,    |  | Lectr.                              |
| M.A.                               |  |                                     |
| <i>Modern Languages</i>            |  |                                     |
| Herdener, C. F., M.A. (B.A. Lond.) |  | Prof.                               |
| Lambley, Kathleen, M.A., D. ès L.  |  | Lectr.                              |
| Rennes                             |  |                                     |
| Galland, M.                        |  | Fr. Asst.                           |
| Bénier, M.                         |  | Fr. Asste.                          |
| <i>Music</i>                       |  |                                     |
| Bridge, J. C., M.A., D.Mus.        |  | Prof.                               |
| <i>Philosophy</i>                  |  |                                     |
| Jevons, F. B., M.A. Ox., D.Litt.   |  | Prof.                               |
| <i>Psychology, v. Educn.</i>       |  |                                     |
| <i>Theology, v. also Div.</i>      |  |                                     |
| Coleman, N. D., M.A. Camb.         |  | Lectr. in T. and Hellenistic Greek. |
| Jones, Donald, B.D.                |  | Lectr. in Christian Evidences.      |
| <b>Adult Education</b>             |  |                                     |
| 14 Tutors for 21 classes.          | Secy. to the Joint Committee:                | Rev. E. G. Pace.                    |
|                                    | Organizing Secy. of N.E. District of W.E.A.: | Alderman W. N. Smith.               |

## THE DURHAM COLLEGES

UNIVERSITY. Master—H. Ellershaw, M.A. Censor and Bursar—A. A. Macfarlane-Grieve, M.A. Chaplain—E. P. Pestle, M.A.

HATFIELD. Master—A. Robinson, M.A., D.C.L. Vice-Master and Chaplain—E. G. Pace, M.A., B.D. Censor—C. F. Herdener, M.A. Bursar—J. L. Burchnall, M.A.

ST. CHAD'S. Principal and Chaplain—S. R. P. Mouldsdale, M.A., B.D. Vice-Principal—C. E. Whiting, M.A., B.D., B.C.L. Classical Lectr.—L. A. Body, M.A. Tutorial Fellow—J. P. Boden, B.A.

ST. JOHN'S. Principal and Chaplain—C. S. Wallis, M.A. Vice-Principal—P. R. Frost, M.A. Asst. Chaplain and Bursar—H. Y. Ganderton, M.A.

BEDE. Principal—D. Jones, B.D. Vice-Principal—A. Oswell, B.A. Lectrs.—T. W. Powell, M.A.; F. Bentley, B.A.; F. E. Dann, M.A., M.Litt.; G. Turley, B.Sc.

ST. MARY'S (for women). Principal—Rachel Donaldson, M.A. Censor and Tutor—Marjorie Sinclair, M.A.

NON-COLLEGIATE STUDENTS. Censor—J. H. How, M.A.

HOME STUDENTS (Women). Censor—Kathleen Lambley, M.A., D. ès L.

## GENERAL INFORMATION

University College was formed at the opening of the Univ.; Hatfield was opened (as Bishop Hatfield's Hall) in 1846, St. Chad's in 1904, St. John's in 1909. Bede College, founded in 1839, was brought into connexion with the Univ. in 1919 as a licensed Hall of Residence for Undergraduates. St. Mary's College, opened in 1899, is the residence for women.

LIBRARY, 38,000 vols., including rare theological and patristic books. MUSEUM with a nearly complete collection of British birds. OBSERVATORY with almucantar, etc.

FELLOWSHIPS, 3 Tutorial, £200 to £300, and 1 ordinary, £200, open only to candidates who have kept terms and taken B.A. in Durham Division.

FEES. Including admission, tuition, examns., board and lodging, subscriptions and gratuities, at Univ. College, £120 p.a.; Hatfield, £100; St. Chad's, £100; St. John's, £103:10s.; St. Mary's, £105. Non-Coll. students pay £24 p.a., Univ. fees including club subscriptions.

THE YEAR 1921-22. Students matriculated, 189, including 22 women.

# COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE

*Chairman of the Court of Governors*—W. J. SANDERSON, J.P.

*President of the College and Vice-Chairman of the Court of Governors*—

DAVID DRUMMOND, C.B.E., M.A., M.D., D.C.L., LL.D.

*Registrar*—Prof. R. HOWDEN, M.A., M.B., D.Sc.

*Treasurer*—C. A. COCHRANE, M.A., D.C.L., J.P.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Anatomy*

Howden, R., M.B., C.M. Edin.,  
M.A., M.B., D.Sc. Prof.

### *Demrs. :*

Green, R. B., F.R.C.S.

Whillis, J., M.B., B.S.

### *Lectrs. in Appl. A. :*

Clay, J., C.B.E., M.B., B.S.,  
F.R.C.S.

Lickley, J. D., M.D. Glas.

*Bacteriology, v. Path. Comp.*

### *Biology*

Potter, M. C., M.A. Camb. and  
Durh., Sc.D. Camb., F.L.S.

(Botany) Prof.\*  
Meek, A., D.Sc., F.Z.S. (Zool.)  
Prof.\*

### *Chemistry*

Haworth, W. N., D.Sc. Manc.,  
Ph.D. Gött., M.Sc. Prof.\*

Briscoe, H. V. A., D.Sc. Lond.,  
A.R.C.Sc., D.I.C. Prof.

### *Children, Diseases of*

Ogden, O. W., M.D. Lectr.

### *Dental Science, v. infra*

### *Dermatology, Clinical* [Lectr.

Bolam, R. A., O.B.E., M.D.

Thompson, S., M.B. Asst.

### *Hygiene, v. Pub. Health*

### *Laryngology & Otology, Clinical*

Whillis, S. S., M.D., B.S. Lectr.

Wilson, W. F., M.B., B.S. Asst.

### *Materia Medica and Pharmacology*

Hume, W. E., C.M.G., M.A., M.D.,  
B.C. Camb., F.R.C.P. Prof.

### *Medical Jurisprudence*

Hardcastle, W., M.B. Lond.,  
B.Hy., D.P.H. Durh. Lectr.

### *Medicine, Principles and Practice of*

Drummond, Sir D., C.B.E., M.A.,  
M.D. Dub. and Durh., D.C.L.,  
LL.D. Prof.

Oliver, Sir T., M.D. Glas. and  
Durh., LL.D. Glas., D.Sc.  
Sheff., M.A., F.R.C.P. Prof.

### *Medicine, Clinical*

Prof. Beattie (v. Therap.) Lectr.

Prof. Hume (v. Mat. Med.) Lectr.

Drummond, H., M.D., B.S. Lectr.

Parkin, A., M.D., F.R.C.S. Lectr.

Hall, G., C.M.G., M.D., B.Sc. Lectr.

Patterson, D. W., O.B.E., M.B.,  
B.S. Lectr.

Hunter, T. C., M.D., B.S. Lectr.

Nattrass, F. J., M.D., B.S. Lectr.

\* Also in Armstrong Coll.

*Midwifery and Gynæcology*

Lyle, R. P. R., M.A., M.D. Dub.  
and Durh., B.Ch., B.A.O.  
Dub. Prof.  
Murray, E. F., M.D. St. And.,  
F.R.C.S. Lectr.

*Ophthalmology and Clin. Ophth.*

Wardale, J. D., M.A., M.B., B.S.  
Prof.  
Arkle, J. S., M.B. Asst.

*Pathology and Clin. Path.*

McDonald, S., M.D., F.R.C.P.  
Edin., M.A. Prof.  
Shaw, A. F. B., M.D. Dub., D.P.H.  
Lectr.

*Pathology, Comp., and Bacteriology*

Hutchens, H. J., D.P.H. Ox.,  
M.A. Heath Prof.  
Clayton, F. H. A., M.D. Lectr.  
Buckell, M. A. C., M.B. Lond.,  
D.P.H. Lectr.  
Warren, S. H., M.R.C.S., L.R.C.P.,  
D.P.H. Lectr.  
Wallace, J. M., M.A. Camb.,  
M.R.C.S., L.R.C.P. Lectr.  
Whitehead, H. R., M.Sc. Leeds  
Chemist.

*Pathology, Medical*

Prof. Hume (v. Mat. Med.) Demr.

*Pathology, Surgical*

[Demr.  
Drummond, H. (v. Surg. Clin.)

*Physics*

Stroud, H., M.A. Camb. and  
Durh., D.Sc. Lond. and Durh.,  
F.Ph.S.L. Prof.\*  
Todd, G. W., M.A., D.Sc. Prof.\*

*Physiology*

[Prof.  
Burns, David, M.A., D.Sc. Glas.  
Clark, G. A., M.D. Lectr.  
Secker, J., B.Sc. Demr.

*Psychological Medicine*

..... Lectr.

*Public Health*

Kerr, H., O.B.E., M.D. Edin.,  
D.P.H. Prof.

*Surgery*

Angus, H. B., M.B., M.S., F.R.C.S.  
(Lectr. in Clin. S.) Prof.  
Turner, G. G., M.B., M.S., F.R.C.S.  
(and in Clin. S.) Lectr.

*Clinical Lectrs. :*

Martin, A. M., M.B., B.S.  
Leech, J. W., M.D., M.S., F.R.C.S.  
Edin.

Clay, J. (v. Anat.)

Willan, R. J., M.V.O., M.B., M.S.,  
F.R.C.S.

Drummond, Hamilton, M.B.,  
F.R.C.S. Edin.

Pybus, F. C., M.B., M.S., F.R.C.S.

Johnston, H. M., B.A., M.B. Belf.,  
F.R.C.S.

Barclay, J. H., M.D., M.S.,  
F.R.C.S.

Hodgson, N., M.B., M.S.

Hindmarsh, T. A., M.B., M.S.,  
F.R.C.S.

*Therapeutics*

Beattie, T., M.D., F.R.C.P. Prof.

*Electrotherapy*

Arnison, W. D., M.D., B.S. Lectr.

*Zoology, v. Biol.*

**Dental Science**

*Lectrs. :*

Richardson, E. Y., L.D.S. (D.  
Anat. and Physiol.).

Daniels, J. W., L.D.S. (D.  
Mechanics).

Iotinga, C., L.D.S. (D. Metallurgy).

Coltman, J., L.D.S. (D. Surg. and  
Path.).

Walkinsaw, T. R. D., L.D.S. (Op.  
D. Surg.).

Cooper, E. R., L.D.S. (Ortho-  
dontia).

Alderson, W. E., M.D. (D. Anæ-  
sthetics).

Bolam, J., L.D.S. (D. Mat. Med.  
and Therap.).

Iaing, A. M., L.D.S. (D. Micro-  
scopy and Histology).

6 Hon. D. Surgeons, 16 Hon. Asst. D. Surgeons, 3 Anæsthetists, 1 Hon. Anæsthetist, 1 Hon. Radiographer.	Hutson, W., L.D.S. Prosthetic Tutor. Markham, H. R., L.D.S. Tutorial D. Surgeon.
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## GENERAL INFORMATION

Instruction in Biology, Chemistry, and Physics is given at Armstrong College; in Clinical Medicine and Surgery, etc., in the Royal Victoria Infirmary and other hospitals.

LIBRARIES, 13,000 vols. MUSEUMS: Anat., Hygiene, Mat. Med., Path.

SCHOLARSHIPS open to graduate students of the Coll.: £25, £40 (Durh. graduates only), £200.

FEES. For Tuition, 5-yrs.' course for M.B., B.S., about £200, including Hospl. Fees, Practical Midwifery, Instruction in Fevers and Vaccination, and Students' Union; 4-yrs.' course for L.D.S., about £145. Examns. for M.B., B.S., £30; L.D.S., £12. Degree fees for M.B., B.S., £12: 12s.; L.D.S., £3.

## THE YEAR 1921-22

BENEFACTIONS. Public subscriptions, £5000.

NEW BUILDINGS. New Bacteriological Laboratories are being erected; a Union building for the students of the College of Medicine and Armstrong College will be erected without delay at an estimated cost of £38,000.

NUMBER OF STUDENTS. 436, including 8 part-time, 3 graduate and research, 73 women. New entries for 1922-23, 45. Number of degrees obtained, 72; diplomas and licences, 13.

DEATH. J. Middlemass. RESIGNATIONS. Miss M. Atkinson, C. M. Smithies.

# DURHAM: ARMSTRONG COLLEGE, NEWCASTLE

## ARMSTRONG COLLEGE, NEWCASTLE-UPON TYNE

*President of the College*—Rt. Hon. VISCOUNT GREY OF FALLODON, K.  
P.C., D.C.L.

*Chairman of Council*—Sir HUGH BELL, D.C.L., LL.D.

*Vice-Chairman of Council*—PERCY CORDER.

*Principal*—Sir THEODORE MORISON, K.C.S.I., K.C.I.E., C.B.E., M.  
D.C.L.

*Registrar*—J. Y. T. GREIG, M.A.

*Librarian*—F. BRADSHAW, M.A., D.Sc.

*Warden of Women's Hostel*—CLEMENTINE M. HAWTHORN, B.Sc.

### PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Accounting</i>		Bullock, R.	
Bell, Albert, A.C.A.	Lectr.	Master of Painting a Asst. Dir.	
<i>Agriculture and Rural Economy,</i> v. also Forestry		Bertram, R. J. S. (Design)	
Gilchrist, D. A., B.Sc. Edin., M.Sc.	Prof.	Reid, J. M. W., A.R.C.A. (Scu ture).	
Wheldon, R. W., B.Sc.	Lectr.	Weightman, F. N., L.R.I.B. (Archit.).	
Pawson, H. C.	Lectr.	Heslop, A. (Engraving).	
Worters, C. C. (Land Surv., etc.)	Lectr.	4 Craft Teachers.	
<i>Agricultural Botany</i>		<i>Botany</i> , v. also Agric.	
Lynn, Doris, B.Sc. Lond.	Lectr.	Potter, M. C., M.A., Sc.D. Caml F.L.S. Prof	
<i>Agricultural Chemistry</i>		Blackburn, Miss K. B., M.S Lond. Lect	
Collins, S. H., M.Sc.	Adviser & Lectr.	Bartlett, A. W., M.A. Caml B.Sc. Lond. Lect	
Hall, A. A., M.Sc. Liv. and Manc., Ph.D. Jena	Lectr.	Griffiths, B. M., M.Sc. Birm. Lect	
<i>Agricultural Zoology</i>		<i>Chemistry</i> , v. also Agr.	
Gray, R. A. H., M.A., B.Sc. Aberd., M.Sc.	Adviser & Lectr.	Haworth, W. N., D.Sc. Manc Ph.D. Gött., M.Sc. Prof	
Buckle, P., M.Sc. Manc.	Lectr.	Briscoe, H. V. A., D.Sc. Lond A.R.C.Sc., D.I.C. (Inorg. an Physical C.) Prof.	
<i>Art</i>		Smythe, J. A., D.Sc., Ph.D. Göt M.A. Reade	
Hatton, R. G., A.R.C.A. Lond., M.A.	Prof. and Dir. of School.	Madgin, W. M., M.Sc. Lect.	

\* Also in Coll. of Med.

Robinson, P. L., M.Sc. Lectr.  
 Mallen, Miss C. E. Lectr.  
 Leitch, Miss G. C., M.A., B.Sc.,  
     Ph.D. St. And. Lectr.  
 Allpress, C. F., B.Sc. Birm. Lectr.  
 Irvine, F. M., B.Sc. Lectr.

*Classics and Ancient History*

Duff, J. Wight, M.A. Aberd., Ox.  
     and Durh., D.Litt. Ox. and  
     Durh., LL.D. Aberd. Prof.  
 Pemberton, R. A. K. Lectr.  
 Shipley, Miss C. M. Lectr.  
 Waddell, W. G., M.A. Glas. and  
     Lond. Lectr.

*Economics and Econ. Geog., v.  
 also Accounting, Law*

Hallsworth, H. M., O.B.E., M.A.  
     Manc., M.Com. D. Dale Prof.  
 Stevenson, Miss E. F., M.A. Lectr.  
 Jebb, Miss G. E. M. Lectr.  
 Opie, R., B.Com. Lectr.

*Education*

Thomson, G. H., Ph.D. Stras.,  
     D.Sc. Prof.  
 Melville, Ellen L., M.A. Manc.,  
     Leeds, and Durh. Lectr.  
 Brown, V., O.B.E., B.Sc. Lectr.  
 Bailes, Stella, B.Sc. Lectr.  
 Duff, J. F., M.A. Camb. Lectr.

*Engin., Mechanical, Marine and  
 Civil, v. also Met., Nav. Arch.*

Hawkes, C. J., M.Sc., A.M.I.C.E.,  
     M.I.N.A., M.I.M.E., R.N.  
     (retd.) Prof.  
 Morrow, J., M.Sc. Manc. and  
     Durh., D.Eng. Liv. Reader.  
 Hardy, G. F., M.Sc. Lectr.  
 Holmes, R. W., B.Sc., A.M.I.C.E.  
     Lectr.  
 Hall, J., A.M.I.E.E. Lectr.  
 Dixon, J. T. Lectr.  
 Davies, S. J., B.Sc. Lond.,  
     A.M.I.M.E. Lectr.  
 Martin, H. E. L., B.Sc. Bris. and  
     Lond., A.M.I.C.E. Lectr.

*Engineering, Electrical*

Thornton, W. M., O.B.E., D.Sc.  
     Manc., Liv., and Durh.,  
     D.Eng. Liv., M.I.E.E. Prof.  
 Downie, F. H., O.B.E., B.Sc.  
     Glas., M.I.E.E. Lectr.  
 Harle, J. A., M.Sc. Lectr.

*English*

Renwick, W. L., M.A. Glas.,  
     B.Litt. Ox. J. Cowen Prof.  
 Wragge, Sybil, B.A. Dub. Lectr.  
 Taylor, A. B., B.A. Ox. Lectr.

*Forestry*

[Lectr.  
 Hopkinson, A. D. (Agr. and F.)

*Geography, v. Econ.*

*Geology*

Hickling, G., D.Sc. Manc., M.Sc.  
     Prof.  
 Woolacott, D., D.Sc. Lectr.  
 Mockler, G. S., B.Sc. Liv. Lectr.  
 Tomkeieff, Serge Lectr.

*Crystallography and Mineralogy*

Fletcher, M., M.A. Camb. and  
     Durh., M.Sc., F.G.S. Lectr.

*History, Modern*

[Prof.  
 Morison, J. L., M.A., D.Litt. Glas.  
 Bradshaw, F., M.A. Ox. and Durh.,  
     D.Sc. Lond. Lectr.  
 Pybus, Miss H. J., M.A. Ox. Lectr.  
 Tesh, Miss E., M.A. Manc. Lectr.

*History, Ancient, v. Classics*

*Law, Commercial*

Fenwick, C. B., M.A. Ox., Bar.-at-  
     Law Lectr.

*Mathematics*

Jessop, C. M., M.A. Camb. Prof.  
 Caunt, G. W., M.A. Camb. and  
     Durh., M.Sc. Reader.  
 Colborne, D. C., M.A. Camb. Lectr.

*Mathematics, Applied, and Math.*

*Physics*

Havelock, T. H., M.A. Camb.,  
     D.Sc., F.R.S. Prof.  
 Goldsbrough, G. R., D.Sc. Lectr.  
 Miles, W. A., B.A. Ox. Lectr.



*Metallurgy, Mining and Surveying*

Louis, H., M.A., D.Sc., A.R.S.M.,  
M.I.C.E., F.I.C., F.G.S.  
Prof. W. Cochrane Lectr.  
Dean, H., M.Sc., A.R.S.M. Lectr.  
Contodimos, B.D., B.Sc. Lectr.

*Military Science* [Lectr.  
Grieve, Capt. A. A. M., M.C., M.A.

*Modern Languages*

Latham, A. G., M.A. Lond. and  
Durh. Prof.  
MacGregor, Liliat, M.A. Edin., D.  
de l'U. Gren. (Fr. and Ger.)  
Lectr.  
Vallette, Jean, L. ès L. Paris (Fr.)  
Lectr.  
Vallette, Madame Lectr.  
Rees, J. W. (Spanish) Lectr.

*Music*

Whittaker, W. G., B.Mus.,  
F.R.C.O. Lectr.

*Naval Architecture*

Welch, J. J., D.Sc., M.I.C.E.,  
M.I.N.A. Prof.  
Alexander, F. H., M.Sc., M.I.N.A.  
Reader.

*Philosophy, Mental and Moral*

Hoernlé, R. F. A., M.A., B.Sc. Ox.  
Prof.  
Alderson, Mrs., M.A. Aberd. Lectr.

*Physics*

Stroud, H., M.A., D.Sc. Camb.  
and Durh., M.I.E.E. Prof.\*  
Todd, G. W., M.A. Camb., D.Sc.  
Birm., M.Sc. Prof.  
Bullerwell, J. W., M.Sc. Lectr.  
Lunnon, R. G., M.A., B.Sc. Lond.  
Lectr.  
Laverick, Miss L. W., M.Sc. Lectr.  
Faid, W., B.Sc. Lectr.

*Religious Knowledge*

Fletcher, Rev. M., M.A. Camb.  
and Durh., M.Sc. Lectr.  
Fyffe, Rev. D., M.A. Edin. Lectr.

*Zoology*, v. also Agric. [Prof.\*

Meek, A., B.Sc. St. And., D.Sc.  
Peacock, A. D., M.Sc. Lectr.  
Jorgensen, Olga, M.Sc. Lectr.  
Harrison, J. W. H., D.Sc. Lectr.  
Flattely, F. W. Lectr.  
Meek, Edith M., M.Sc.  
Bio-Chemist.

**Adult Education**

Tutors : Prof. Hallsworth (Econ.) ;  
W. G. Whittaker (Music) ;  
The Regr. (Psychology) ; F.  
W. Wadeley, M.A., D.Mus.  
(Music). A. B. Taylor (Eng.  
Lit.) ; Hon. Sec. to Jt.  
Committee: Miss E. F. Steven-  
son, M.A.

**GENERAL INFORMATION**

**LIBRARY**, 35,000 vols. Access to Lit. and Philos. Society's 80,000 vols., and to library of N. of England Inst.M.M.E. Scientific periodicals subscribed for in co-operation with City Public Library. **LABORATORIES** with special facilities for research in Engineering and Hydraulics ; special branches of Chem., Physics, and Agric. ; Marine Biology. The Agric. Dept. controls and uses for teaching and research in Agric., Dairying, and Forestry several County and Crown estates.

Complete Courses for the Arts, Science, and Commerce Degrees and the Educn. Diploma of the Univ.

College Diplomas in Agric. (3 yrs.' course), Commerce, Engineering and Naval Archit. (3 yrs., reducible in special cases to 2), Mining (2 yrs.), Mine Surveying (2 yrs.), Fine Art (3 yrs.), Architecture (5 years).

\* Also in Coll. of Med.

FELLOWSHIPS, ETC. £300, for one year, open to a graduate in Science or Commerce; £120 for travel in foreign mining districts, open to any mining student; £75 : 10s. (two) studentships and £150 Fellowship for graduates from the College, for research; £150, studentship open to graduate in Arts.

FEES for Tuition for B.A. or B.Com., £30 p.a.; B.Sc., £35 p.a. (in Engin., etc., £40); Diploma in Agric., £22 : 10s.; in Teaching, £35; in Engin., etc., £40; in Fine Arts, £16; in Commerce, £5 : 10s. per subject. Examns. for B.A. or B.Sc., £7; Students' Societies (men), £2 : 2s., women, £1 : 5s. Registration Annual (Degree students and some others), £2.

PUBLICATIONS. *Annual Report* (Oct.).

## THE YEAR 1921-22

BENEFACTIONS. Donation of £10,000 for Students' Union, donation of Groundsman's House for Playing Fields.

ORGANIZATION. The teaching of Architecture has been reorganized within the Fine Art Department.

NUMBER OF STUDENTS. Research and Post-graduate, 78; other full-time students in Arts, 152 (including 100 women); Pure Science, 244 (women, 54); Engin., 144 (women 1); other Faculties, 254; part-time, 400 (women 110). Grand Total, 1188.

RETIREMENTS AND RESIGNATIONS. Prof. Vickers (Mod. Hist.) on apptmt. to Principalship, Univ. College, Southampton; A. Hamilton Thompson (Lectr. in Mod. Hist.) on apptmt. to Readership in Leeds; Mr. J. Macdonald (Lectr. in Classics) on apptmt. to a Lect'ship in Aberdeen.

# UNIVERSITY OF LEEDS

VISITOR—H.M. THE KING.

CHANCELLOR—His Grace the DUKE OF DEVONSHIRE, K.G., G.C.M.G.,  
G.C.V.O., LL.D.

PRO-CHANCELLOR—E. G. ARNOLD.

VICE-CHANCELLOR—Sir MICHAEL E. SADLER, K.C.S.I., C.B., LL.D.,  
Litt.D.

PRO-VICE-CHANCELLOR—Prof. A. SMITHELLS, C.M.G., B.Sc., F.R.S.

TREASURER—Hon. R. E. BECKETT.

REGISTRAR—A. E. WHEELER, M.A.

ACCOUNTANT—G. R. BRENCH.

CLERK TO THE SENATE—F. T. BAINES, B.A.

DEAN OF WOMEN STUDENTS—Miss A. SILCOX, B.Sc. Lond.

LIBRARIAN—R. OFFOR, B.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

[(C.) = Clinical Lectr. ; (H.) = Hon. Demr. ; (R.) = Research Asst.]

### *Agriculture*, v. also Vet. Hyg.

Seton, R. S., B.Sc. Edin. Prof.  
Archibald, C. F. Lectr.  
Robertson, G. C. A., M.A., B.Sc.  
Aberd. Lectr.  
Ruston, A. G., B.A., B.Sc. Lond.,  
D.Sc. (Farm Econ.) Lectr.  
Galt, A. S. (Hortic.)

Lectr. & Organr.

Parton, F. W. (Poultry) Lectr.  
M'Millan, J. A., B.Sc. Edin.  
Asst. Lectr. & Demr.

Dist. Lectrs. :

Thompson, H., B.Sc. Manc., B.Sc.  
Strachan, J., M.A., B.Sc. Aberd.,  
N.D.A.

Pilling, G. F., B.A. Camb., N.D.A.

Lynn, J. C., B.Sc.

Leslie, J. C., M.A., B.Sc.

9 Instrs. and Asst. Instrs. in Dairy-  
ing, Hortic. and Farriery

### *Agric. Botany*

Millard, W. A., B.Sc. Bris. Lectr.  
Bennett, F. T., B.Sc. Lond.  
Asst. Lectr.  
Burr, S. Demr.  
Edwards, R. E., B.Sc. Demr.

### *Agric. Chemistry*

..... Prof.  
Hanley, J. A., Ph.D. Mun.,  
A.R.C.S. Lectr.  
Comber, N. M., B.Sc. Lond.,  
A.R.C.S., A.I.C. Lectr.  
Mann, J. C., B.Sc., A.I.C.  
Saint, S. J., B.Sc. Asst. Lectr.  
Asst. Lectr.

### *Agric. Zoology*

Taylor, T. H., M.A. R.U.I. Lectr.  
Hobbins, Maisie, M.Sc.  
Asst. Lectr.

*Anatomy* [Prof.  
Jamieson, J. Kay, M.B., C.M.  
Edin. (Dean of Med. Fac.)  
Law, F. R., M.B. Lond. Demr.  
Morton, W. C., C.B.E., M.A., M.D.  
Edin. (H.).  
Richardson, A., M.B. Lond.,  
F.R.C.S. (C.) (H.).  
Compston, G. C., B.A., M.R.C.S.  
(H.).  
Tasker, R. B., L.D.S., Hon. Demr.  
in A. for Dental Students

*Bio-Chemistry, v. Physiol.*

*Botany* [Prof.  
Priestley, J. H., B.Sc. Lond.,  
F.L.S. (Dean of Science Fac.)  
Wager, H., D.Sc., F.R.S. (My-  
cology) Hon. Lectr.  
Walker, N. (Morphol.) Lectr.  
Pearsall, W. H., M.Sc. Manc.  
Reader  
Ewing, J., M.A., D.Sc. Aberd.  
Asst. Lectr.

Scott, Lorna I., B.S. Lond. Demr.  
Woffenden, Lettice, M.Sc. (R.).  
Pearsall, Mrs. W. H., M.Sc. Manc.  
Demr.  
Priestley, Mrs. (H.).  
Grist, Mrs., B.Sc. Lond. (H.).  
Carey, Miss R. M. T.

Research Asst.

*Chemistry, v. also Physiol. and  
Tech.*

Smithells, A., C.M.G., B.Sc. Lond.  
and Manc., F.R.S. (until Sept.  
1923) Prof.  
Lowson, W., B.Sc. Lond., B.Sc.,  
F.I.C. (Analyt. C.) Lectr.  
Barratt, S., B.A. Ox.  
Asst. Lectr. & Demr.  
Gregory, J. C., B.Sc., F.I.C.  
Asst. Lectr. & Demr.  
Leslie, May S., D.Sc. „ „  
Whitaker, H., M.Sc. (R.).  
Wagstaff, Mrs., M.A. Aberd.  
Demr.  
Clark, C. H. D., B.Sc. Lond. „  
Hume, J., B.Sc., A.I.C. Demr.  
Henderson, T., M.A., B.Sc. Demr.

*Chemistry, Physical*  
Dawson, H. M., B.Sc. Lond., Ph.D.  
Gies., D.Sc. Prof.

*Chemistry, Organic*  
Cohen, J. B., B.Sc. Manc., Ph.D.  
Mun., F.R.S. Prof.  
Dutt, P. K., M.A. Calc., M.Sc.,  
A.I.C. Asst. Lectr. & Demr.  
Wightman, W. A., B.A. Demr.  
Ellingworth, S., M.Sc. (R.).

*Classics*

Roberts, W. R., M.A., Litt.D.  
Camb., LL.D. St. And.,  
Litt.D. Wales Prof.  
Connal, B. M., M.A. Ox. Prof.  
White, H. G. E., M.A. Ox. (Class.  
Archæol.) Lectr.  
Bibby, E. E., M.A. Camb., M.A.  
Lectr.

*Dental Anatomy and Physiology*  
Mawer, J. W., L.D.S. Lectr. & (C.).  
Crawford, J. K., L.D.S. (H.).

*Dental Mechanics*  
Rippon, C., L.D.S. Lectr.

*Dental Metallurgy*  
Lowson, W., B.Sc. Lond., B.Sc.,  
F.I.C. Lectr.

*Dental Radiology*  
Scargill, H. B., M.B., B.S. Lectr.

*Dental Surgery*  
Phillips, G. A., L.D.S.

Lectr. & (C.).  
Hey, S. D., L.D.S. (Operative  
D.S.) Lectr. & (C.).  
The Lectrs. in Dent. Anat. and  
Physiology, Dent. Mech., and  
Dent. Metallurgy  
Lectrs. and (C.).

Leigh, P. T., L.D.S. (C.).  
Marston, W., L.D.S. (C.).  
Saville, D., L.D.S. (C.).  
Thorburn, W. S., L.D.S. (C.).  
Grundy, G. C., L.R.C.P., M.R.C.S.,  
L.D.S. (C.).  
Iles, G. D., L.D.S. (C.).  
Wilkinson, G. L., L.D.S. (C.).  
Harris, W. S., L.D.S. (C.).  
Crawford, J. K., L.D.S. (C.).  
3 Hony. Clin. Tutors

*Dentistry, Clinical*

Sykes, J. G., B.Ch.D. Demr.  
Watt, C. V., L.D.S. Prosth. Demr.

*Economics*

Jones, J. H., M.A. Wales Prof.  
Shimmin, A. N., M.A. Manc. Lectr.  
Dower, R. S., M.A. Camb. (Social  
Organization) Lectr.  
Taylor, J. R., M.A. (Ec. Hist.)  
Lectr.  
..... (Statistics) Lectr.  
McCarmick, A. (Acctcy.) Lectr.  
..... Asst. Lectr.  
..... Tutor.

*Education*

Strong, J., C.B.E., M.A. Lond.,  
LL.D. St. And. Prof.  
Welpton, W. P., B.Sc. Lond.  
Lectr.  
Monahan, A. J., M.A. Lectr.  
Wynn-Jones, LL., Ph.D. (Expl.  
E.) Lectr.  
Curtis, S. J., B.A. Lond.  
Asst. M. of Method.  
Blackburn, Eliz. M., M.A.  
M. of Method.  
Robson, Winifred F., B.A.  
Asst. M. of Method.  
Holgate, Miss J., B.A. Asst. Lectr.  
..... Asst. Lectr.  
..... Art Teacher.  
Hoggett, T. J., Mus.B. Durh.  
Music, etc.  
Wall, Miss E. M. Needlework.

*Engineering, Civil and Mech.*

David, W. T., M.A., Sc.D. Camb.,  
D.Sc. Wales Prof.  
Gilchrist, J., B.Sc. Edin., A.M.I.C.E.  
Lectr.  
Naylor, T. M., B.Sc. Manc.,  
A.M.I.C.E., A.M.I.M.E.  
Asst. Lectr.  
Colles, C., B.Sc. Manc. Demr.  
Somerscales, A. Demr.  
Kelly, H. C., B.Sc. Tech. Manc.  
Demr.  
Richardson, S. G. Demr.  
Swift, H. W., B.A. Demr.

*Engineering, Elec.*

French, W. E., A.M.I.C.E. Lectr.  
Stuart, W. S., B.Eng.  
Asst. Lectr. & Demr.

*English Lang. and Lit.* [Prof.

Abercrombie, Lascelles, M.A.  
Tolkien, J. R. R., M.A. Ox.  
Reader in E. Lang.  
Cowling, G. H., M.A. Lectr.  
Gordon, E. V., M.A. Ox.  
Asst. Lectr.  
Childe, W. R., M.A. Ox.  
Asst. Lectr.

*French (and Romance Philol.)*

Barbier, P., M.A. Lond.  
Prof. (Dean of Fac.).  
Gunnell, Doris, M.A., D. de l'U.  
Paris Lectr.  
Soltau, R. H., M.A. Ox. Lectr.  
Murray, Jessie, M.A. St. And.  
Asst. Lectr.  
Inebnit, J. P. Asst. Lectr.

*Geography*

Fawcett, C. B., B.Litt. Ox., M.Sc.  
Lond. Reader.  
Williamson, A. V., B.Sc.  
Asst. Lectr.

*Geology*

Gilligan, A., D.Sc., F.G.S. Prof.  
Versey, H. C., M.Sc. Lectr.  
Hudson, R. G., M.Sc., F.G.S.  
Asst. Lectr.

*German Lang. and Lit.*

..... Prof.  
Gough, C. E., Ph.D. Basle Lectr.  
Caldwell, Mary C., B.A.  
Asst. Lectr.  
Scott, Miss Alice, M.A. Lond.  
Asst. Lectr.

*Hebrew*

Blomfield, W. E., B.A., Ph.D., at  
Rawdon Coll.

*Histology, v. Physiology**History*

Grant, A. J., M.A. Camb. Prof.  
Sellers, Maud, D.Litt. Reader.

Thompson, A. Hamilton, M.A.,  
F.S.A. Reader.

Dainton, A. H., M.A. Ox.  
Asst. Lectr.

Richardson, G. W., B.A.  
Asst. Lectr.

*History, Eccles.* (Recognized  
Teacher)

Underwood, A. C., M.A., B.Litt.,  
B.D., at Rawdon Coll.

*Law* [Prof.  
Hughes, J. D. I., M.A., B.C.L. Ox.  
Lectrs. :

Haggen, G. L., M.A. Ox., B.C.L.  
Burrill, H. R., LL.B. (part-time)

### *Mathematics*

Milne, W. P., M.A. Camb., D.Sc.  
Aberd., M.A. Prof.

Brodetsky, S., M.A. Camb., Ph.D.  
Leip. (Applied M.) Reader.

Berwick, W. E. H., M.A. Camb.  
Reader.

Gilham, C. W., M.A. Camb., B.Sc.  
Lond. Lectr.

Smeal, G., B.Sc. Melb. (Graphics,  
etc.) Asst. Lectr.

Steward, G. C., B.A. Camb., M.Sc.  
Lond. Asst. Lectr. in Appl. M.

*Medicine and Surgery, v. infra*

*Metallurgy, v. Tech.*

*Mining* [Prof.  
Poole, G., B.Sc., M.I.M.E., F.G.S.

Brown, T., M.Sc., A.M.I.C.E.  
Lectr. in Mine Surveying.

..... Lectr. in Met. M. and  
Ore Dressing.

Bentham, J. Colliery Electrician.

### *Philosophy*

Gillespie, C. M., M.A. Ox. Prof.  
Hallett, H. F., M.A. Edin.

Lectr.

### *Physics*

Whiddington, R., M.A., D.Sc.  
Camb. Cavendish Prof.

Allen, A. O., M.A., B.Sc. Lond.,  
A.R.C.S. (Optics) Lectr.

Wagstaff, J. E. P., M.A., B.Sc.  
Camb. Lectr.

Menzies, A. C., B.A. Camb.  
Asst. Lectr. & Demr.

Ewles, J., M.A. Camb.  
Asst. Lectr. & Demr.

Watson, Clara, M.Sc. Demr.

Long, F. A., B.Sc. Demr.  
2 Asst. Demrs.

### *Physiology and Histology*

Raper, H. S., C.B.E., D.Sc., M.B.,  
Ch.B. (P. and Bio-Chem.)  
Prof.

Winfield, G., M.A. Camb. Lectr.

M'Dowall, R. J. S., M.B. Edin.  
(Expl. P. and Expl. Pharma-  
col.) Lectr.

Botwood, C.A., M.B. Demr. in P.  
Wormall, A., B.Sc. (Bio-Chem.)

..... Demr.  
..... Demr.

Flint, E. R., M.B., Ch.B., F.R.C.S.  
(H.) (C.).

### *Russian Lang. and Lit.*

..... Prof.  
Kolni-Balozky, J. Lectr.

### *Russian History and Music*

Frere, W. H., D.D. (H.).

### *Spanish Lang. and Lit.*

..... Prof.  
Penzol, P. Lectr.

### *Technology, v. infra*

### *Veterinary Hygiene*

Bowes, H. G., F.R.C.V.S. Lectr.

*Zoology, v. also Agric.* [Prof.  
Garstang, W., M.A., D.Sc. Ox.

King, Mrs. W. O. R., B.Sc.  
Asst. Lectr. & Demr.

Percival, E., B.Sc.  
Asst. Lectr. & Demr.

Simpson, Miss M. Asst.  
Garstang, Sylvia, B.A. Ox. (R.).

*Medicine* (for subjects of first 2  
yrs.—Anat., etc., v. *supra*)

*Bacteriology, v. Path.*

## LEEDS

- Dental Science*, v. *supra*
- Forensic Med.* [Prof.  
Eurich, F. W., M.D., C.M. Edin.  
..... Demr. (H.).
- Gynæcology*, v. also Obst. [Lectr.  
Oldfield, C., M.D. Lond., F.R.C.S.  
..... Demr. (H.) (C.).
- Infectious Diseases*  
Pearson, A. E., M.R.C.S.,  
L.R.C.P.E. (C.).
- Materia Med.*, v. Therap.
- Medicine and Clin. Med.*  
Griffith, T. W., C.M.G., M.D.,  
C.M. Aberd., F.R.C.P.  
(C.) Prof.  
Watson, G. W., M.D. Lond.,  
F.R.C.P. (C.).  
Vining, C. W., M.D. Lond., D.P.H.  
(C.).  
Burrow, J. Le F. C., M.B. Edin.  
(C.)  
MacAdam, W., M.A., B.Sc., M.D.,  
Ch.B., D.P.H.  
Med. Tutor and Registrar.
- Mental Diseases*  
Bolton, J. S., M.D., D.Sc. Lond.,  
F.R.C.P. Prof.
- Obstetrics*  
Croft, E. O., M.D. Durh. Prof.  
Gough, W., B.Sc., M.B., B.S.  
Lond., F.R.C.S. (H.) (C.).  
Brown, R. C., M.B., B.Sc. Tutor.
- Obstetrics and Gynæcology* [(C.).  
Young, W. M., M.A., M.D. Glas.  
Adamson, Mrs. R., M.D., B.S.  
Lond. (C.).  
..... (H.).
- Ophthalmology*  
Lee, H., B.A., M.B. Camb.,  
F.R.C.S. (C.) Lectr.  
Whitehead, A. L., M.B., B.S. (C.).
- Otology*  
Bain, E. W., M.B., B.S. Lond.,  
F.R.C.S. (C.) Lectr.  
Munby, W. M., Ch.M. Edin.,  
F.R.C.S. (C.).
- Pathology & Bacteriology* [F  
Stewart, M. J., M.B., Ch.B. G  
McLeod, J. W., O.B.E., M  
Ch.B. Glas.  
Brotherton Prof. o  
..... Lectr. in  
Priestley, A. H., M.B., Ch.B. V  
Lectr. in  
Sutherland, P. L., M.B. G  
D.Sc.  
Lectr. (P. of *Indus.*  
*Diseases*).  
Wyon, G. A., B.Sc. Lond., M  
Edin. Lectr. in P  
Gordon, J., M.B., Ch.B. De  
Phelon, H. V., M.B.  
Gleave, H. H., M.B., Ch.B.  
Hickman, Miss E. M., M.B., Cl  
De  
Child, C. H., L.D.S.  
Hon. Demr. in Dental P  
Cattley, R., M.B., C.M. Ed  
B.Sc., D.P.H. Camb.  
Hon. Fellow  
Veale, R. A., B.A. Ox., M.D., I  
Lond.  
Lectr. in *Dermatology* (  
Coupland, J. A., M.B., B.S. Lo  
F.R.C.S. (C.) (H.) in Surg  
..... (H.) in Clin.  
Stewart, Mrs., M.B. Lond. (I  
Gruner, O. C., M.D. Lond. (I  
..... (I
- Pharmacology*, v. Physiol.
- Pharmacy*, v. Therap.
- Public Health*, v. also Path.  
Jervis, J. J., M.D. Edin., D.P.  
Lond. Prof. of P.H. Adr  
Jennings, H. C., M.B., B.S.  
Demr. (F
- Surgery and Clin. Surg.*  
Moynihan, Sir Berkeley G.  
Bart., K.C.M.G., C.B., M  
Lond., F.R.C.S. Prof. (I  
Coupland, J. A., M.B., B.S. Lon  
F.R.C.S. (F  
Symons, H. W., M.B., Ch.B.  
Clin. As

- Moir, P. J., M.B., Ch.B.  
Clin. Asst.
- Daw, S. W., M.B., B.S. Lond.,  
F.R.C.S. Lectr. in Orth.S. (C.).
- Flint, E. R., M.B., F.R.C.S. (C.).
- Dobson, J. F., M.S. Lond.,  
F.R.C.S. (C.).
- Seaton, D., M.B., Ch.B. Manc.  
(Anæsth.) Lectr.
- Thompson, W., F.R.C.S. (C.).
- Braithwaite, L. R., M.B. Manc.,  
F.R.C.S. (C.).
- Surgery, Operative*
- Collinson, H., C.B., C.M.G., M.B.,  
M.S. Lond., F.R.C.S.  
Lectr. (C.)
- Therapeutics, Pharm., and Mat.  
Med.*
- Maxwell Telling, W. H., M.D.  
Lond., F.R.C.P.  
((C.) in Clin. Med.) Lectr.
- Gough, J. H. (P. and M.M.) Demr.
- Vaccination*
- Greaves, F. W. M., M.B. Manc.,  
D.P.H. Instr.
- Venereal Diseases*
- Bibby, J. P., M.B. (C.).
- Technology, v. also Agr., Engin.,  
Mining**
- Coal, Gas, and Fuel Industries  
with Metallurgy*
- Cobb, J. W., C.B.E., B.Sc. Lond.,  
B.Sc., F.I.C. Livesey Prof.
- Hoddsman, H. J., M.B.E., M.Sc.,  
F.I.C. (Gas Chem.) Lectr.
- Houldsworth, H. S., M.Sc. (Re-  
fractory Materials)  
(R.) & Asst. Lectr.
- Summers, P. F., A.R.S.M. (Metall.)  
Asst. Lectr.
- Research Chemists:
- Wood, J. W., M.Sc. Tech. Manc.
- Parker, A., D.Sc.
- Kerr, H.
- Monkhouse, A. C., Ph.D.
- Howarth, G. B., B.Sc.
- Williams, E. C., M.Sc. (Benzol  
Research)
- Colour Chemistry and Dyeing*
- Perkin, A. G., F.R.S., F.I.C.  
Prof. (Dean of Fac.).
- Forster, R. B., A.R.C.S.I., Ph.D.,  
D.Sc., F.I.C.  
Lectr. & Research Chemist.
- King, P. E. (Dyeing) Lectr. & (R.).
- Sewell, W. G., M.Sc. Leeds (Colour  
Chem.) Asst. Lectr. & Demr.
- Cross, E. J., B.Sc. Demr.
- Davis, C., M.Sc. Demr.
- Leather Industries*
- McCandlish, D., M.Sc. (Applied  
Chem.) Prof.
- Atkin, W. R., M.Sc.  
Asst. Lectr. & Demr.
- Thompson, F. C., M.Sc.  
Asst. Lectr. & Demr.
- Porter, E. C., Ph.D. Demr.
- Procter, H. R., D.Sc., F.I.C.  
Hon. Dir., Internat. Re-  
search Lab.
- Thompson, F. C., M.Sc. (R.).
- Textile Industries*
- Barker, A. F., M.Sc. Prof.
- Hollis, T. Lectr.
- Yewdall, A. Lectr.
- Pickles, F. Lectr.
- Farley, W. A. Asst. Lectr.
- Priestley, G. Asst. Lectr.
- Fisher, E. A., M.A., B.Sc. Camb.,  
A.I.C. Lectr.
- Adult Education**
- Staff Tutors: Dainton, A. H.,  
M.A. Ox.; Gibson, G. W.,  
M.A.; Shimmmin, A. N., M.A.  
Manc.; Stewart, D., M.A.  
N.U.I.; Taylor, J. R., M.A.  
Edin.; Walker, N.



## LEEDS

### AFFILIATED COLLEGES

COLLEGE OF THE RESURRECTION, MIRFIELD (Warden—G. Rees, M and RAWDON COLLEGE (Principal—W. E. Blomfield, B.A., B.D.). Students are exempt from attendance at the Univ. in the first of the 3 yrs. of study on the B.A. degree.

TECHNICAL COLLEGE, HUDDERSFIELD (Prin.—J. F. Hudson, M.A., B.Sc.). Similar exemption for B.A., B.Sc. (including Engin.), and M.B. and Ch.B.

DIOCESAN TRAINING COLLEGE, YORK. Similar exemption for the B.A. and B.Sc.

### GENERAL INFORMATION

The Leeds School of Medicine, founded 1831, and Yorkshire College, established as a College of Science in 1874, were united in 1884. The College formed part of the Victoria Univ. from 1887 to 1904, when a Univ. was established by Royal Charter in the city of Leeds.

LIBRARY, about 88,000 vols. MUSEUMS: Anat., Colour Chem. and Dyestuffs, Materia Med., Path., Textile, Zool. LABORATORIES: Agricultural Chemistry, Botany, Chemistry, Colour Chem. and Dyeing, Engin. (Elec., Civ., Mech.), Geol., Leather Industries (including Procter Internat. Research), Metallurgy and Fuel, Mining, Path. and Bacteriology, Physics, Physiol., Textile Technology, Zool. OBSERVATORY, 18½" reflector telescope. FARM, 312 acres, including Dairy School. HOSPITALS available for Clinics: Infirmary (520 beds), several others; Asylum (2000 inmates).

FACULTIES. Arts (including Economics and Law), Science, Technology (including Agric., Coal Gas and Fuel with Metallurgy, Colour Chemistry, Dyeing, Engineering (Civ., Elec., Mech.), Leather Industries, Mining, Textile Industries, Medicine (including Dentistry).

DEGREES. Obtainable after a 3 yrs.' course starting from matriculation.—B.Sc. (4 yrs. if Supplementary Textile Studies or Colour Chemistry be taken); B.Com., LL.B.; after 5 yrs., M.B., Ch.B., B.Ch.D.

Subject to a minimum attendance in this Univ. of 2 yrs., members of other Univs. requiring residence as a condition of graduation may be permitted to count their studies and exams. (other than the Final examn.) therein towards graduation in Leeds.

Honours students of (1) French and (2) German normally spend the term of the 2nd year at (1) the Univ. of Caen, (2) a Univ. where the medium of intercourse is German.

Honours in Mining or Gas Engin. or Fuel and Metall. involve 1 yr. of research or special study after taking the ordinary degree; in Leather Manuf., 4 yrs. study.

Supplementary Textile studies may be combined with a B.A. or B.Sc. course. Any of the other Tech. subjects may be taken in a B.Sc. course. The Law Dept. prepares students for the Bar and Solicitors' exams. as well as for the Univ. degrees.

HIGHER DEGREES. M.A., M.Sc., LL.M., M.D., Ch.M., 1 yr.; M.Ed. 2 yrs. after the bachelorship. Graduates of approved Univs. (all the chief Univs. of the world, including institutions recognized by the Assocn. of Amer. Univs.)

v. App. XXV.) may obtain the M.A., Ph.D. (v. p. 15), or M.Sc. by 2 yrs. of research. Masters of Arts or Science of this Univ. may obtain the Litt.D. or D.Sc. 6 yrs. after the bachelorship.

Graduates of other Univs. who have been admitted to degrees of equal or similar rank in Leeds may, in proceeding to higher degrees, count their standing as graduates from the date of original graduation.

**DIPLOMAS.** In Education, for graduates, 1 year or 2 yrs. For Teachers of French or German, 2 yrs.' course in Methods of Teaching and Phonetics. In Commerce, 2 yrs. (after matricn. or its equivalent). In Social Organization and Public Service, 2 yrs. In Geography, 1 yr. or 2 yrs. In Engin., Fuel and Metall., Dyeing, Textiles, Leather, 3 yrs., reducible under certain conditions to 2. In Gas Engin. or Fuel and Metall., special for graduates, 1 yr.; for apprentices, part-time, 4 yrs. In Colour Chem. and Dyeing, for apprentices, part-time, 5 yrs. In Public Health, 9 mos. In Psych. Med., 6 mos. In Nursing, involving 4 yrs.' hospital training and 3 mos.' lectures. In Dent. Surg., 4 yrs., including 2 in Univ.

Agric. Students are prepared for the National Diploma.

**FEES.** Matricn., £2. Registration, £2. Composition fees for tuition (including Union): Arts, £33 a session; Science, £41; Technology, £45; Agric. (other than degree students, who pay the Technol. fee in the 2nd and 3rd yrs.), winter course, £20, summer course, £10; Law Intern. course, 12 gs. a session; Final course, 20 gs. Course for Dipl. in Educn., £42 p.a.; Dipl. in Social Organization, £26 p.a. Medicine: complete course for M.B., including hospl. practice, £215. Dentistry (including hospl. practice and pupilage): Dipl., £224; Degree, £252. Research fee, £12 a session. Exams.: Arts, Science, etc., £6; Medicine (including graduation), £18; Dentistry, B.Ch.D., £16; L.D.S., £14. Graduation fee, £6.

**SCHOLARSHIPS, ETC., FOR GRADUATES.** Fellowships, £200 for one year, renewable, for research in Gas, and £100, renewable, in Col. Chem.; also £150 for 2 yrs. for research and advanced study; £70 Scholp. for research in Arts Faculty; £125 for higher Humanistic study, for graduates of Leeds or Sheffield; £45 for advanced study in Greek or Latin; £60, Colour Chem. and Dyeing; £20 (three), in Textile Dept.; £25, Forensic Med. and Hygiene; £150 for 3 yrs. for Textile Research (preference to graduates in Science or Tech. and to natives or residents of Bradford, but not restricted to members of Leeds Univ.).

**RESIDENCE.** Two hostels for men and 5 for women. Fees, men £70 to £72, women £56 to £65 per session of 32 weeks. A site of 160 acres on the outskirts of the city has been acquired for hostels for men and women students.

**UNIVERSITY EXTENSION.** Lecture courses and Tutorial classes are provided in co-operation with the Workers' Educnl. Asscn. and Local Education Authorities, and an Annual Summer School in connexion therewith was instituted in 1919.

The Annual Yorkshire Summer School of Geography, instituted by the Univ. in co-operation with Sheffield Univ. and Armstrong College and with the help of local authorities, lasts about 3 weeks. Certificates are granted.

In connexion with the Agric. Dept. a considerable part of the time of lecturers of the Univ. is devoted to work in local centres.

**PUBLICATIONS.** *Calendar* (Sept.), 2s.; Annual Reports of the Univ. and of Tech. Depts.

## THE YEAR 1921-22

**BENEFACTIONS.** Sir E. Brotherton, Bart., £20,000 for development of teaching and research in Bacteriology; Yorkshire Council for Agric. Educn., £10,000 towards new building; Clothworkers' Company, £5000.

**NEW POSTS.** Medical Tutor and Registrar; 2 Clin. Assts. in Surgery; 3 Hony. Clin. Tutorships in Dental Surgery; Hony. Demr. in Dental Path. and Bact.; Lectr. in Engl.; Reader in Math. Analysis; Asst. Lectrs. in Engl. and French; Demr. in Physics.

**OTHER IMPORTANT OCCURRENCES.** Formal opening by Chancellor of new Educn. building; Geographical Assocn. Meeting; visit of Lord Mayor and City Council; visit of Law Society.

**HONORARY DEGREES** conferred on Sir Harold Stiles, Miss E. B. Cook, R. W. Haydon, A. E. Wheeler, Sir C. S. Sherrington, C. G. J. Petersen, M. Broglie, Pierre Weiss, A. C. Peake.

**OTHER DEGREES.** B.A.—108; B.Sc.—139; B.Com.—8; LL.B.—10; M.B., Ch.B.—37; M.A.—14; M.Ed.—3; M.Sc.—54; Ph.D.—4; D.Sc.—1; M.D.—2.

**NUMBER OF STUDENTS.** Full-time, reading for first degree, 1141, including 308 women; higher degree or post-grad. diploma, 70 (women, 33); other diplomas, 435 (women, 21). Part-time, reading for first degree, 5 (women, 1); higher degree or post-grad. diploma and other research students, 35 (women, 10); other diplomas, 59 (women, 34); non-degree and non-diploma, 307 (women, 85). Evening students, 236.

**STUDENTS FROM ABROAD.** India, 25; Egypt, 10; S. Africa, 5; Denmark, 3; Serbia, 3; China, 5; Japan, 6; other countries, 18.

**EXTRA-MURAL WORK.** Extension lectures on the economic, industrial, and financial situation, local geography, and music appreciation, and on Methods of Teaching in Sunday Schools; Tutorial Classes (3 year), 36, attended by 690 students; Summer School for T.C. students; 623 Agric. and Hortic. lectures at 209 centres.

# UNIVERSITY OF LIVERPOOL

VISITOR—H.M. THE KING.

CHANCELLOR—Rt. Hon. EARL OF DERBY, K.G., G.C.B., G.C.V.O., C.B., LL.D.

PRO-CHANCELLORS—H. R. RATHBONE, M.A., President of the Council ;  
Emeritus Professor R. CATON, C.B.E., M.D., F.R.C.P., LL.D.

VICE-CHANCELLOR—J. GEORGE ADAMI, C.B.E., M.D., F.R.S.

TREASURER—C. SYDNEY JONES, M.A.

REGISTRAR—EDWARD CAREY, LL.B.

BURSAR AND ASSISTANT REGISTRAR—S. PRYCE PARRY, M.A.

LIBRARIAN—J. SAMPSON, M.A., D.Litt.

## PROFESSORS, LECTURERS, ETC.—January 1, 1923

(H.=Honorary Lectr.)

<i>Anatomy</i>		Garstang, J., D.Sc., M.A., B.Litt.
.....	Derby Prof.	Ox., F.S.A. (Methods and
Simpson, G. C. E., O.B.E., B.A.,		Practice of A.) Rankin Prof.
B.Sc., M.B.	Assoc. Prof.	Barnard, F. P., M.A., D.Litt. Ox.,
Douglas-Crawford, D., M.B., C.M.		F.S.A. (Mediaeval A.) Reader.
Edin., F.R.C.S. (Applied and		Newberry, P. E., M.A. (Egyptian
Surg. A.) Independent Lectr.		Art) Reader.
Roberts, John Lloyd, M.D., B.S.,		<i>Architecture</i> , v. also Civ. Design,
B.A., B.Sc., F.R.C.S., (Ap-		Engin.
plied and Med. A.)		Reilly, C. H., O.B.E., M.A. Camb.,
Independent Lectr.		F.R.I.B.A. Roscoe Prof.
Broad, W. H., M.D. (Physical		Budden, L. B., M.A., A.R.I.B.A.
Anthropology)	Lectr.	Senr. Lectr.
Richards, D. H.		Cole, E. R. F., B.Arch., A.R.I.B.A.
Jr. Lectr. & Sr. Demr.		(Rendering, etc.) Lectr.
5 Asst. Demrs.		Marshall, J. E., B.Arch., M.S.A.,
		M.R.S.I. (Building Constn.,
		etc.) Lectr.
<i>Anthropology, Social</i>		Scott, G. Gilbert, R.A., F.R.I.B.A.
.....	Prof.	(Eccl. Archit.) Reader.
<i>Archæology</i> , v. also Palæog. and		Miller, B. A., A.R.I.B.A. (Design)
Associated Institutions		Junr. Lectr.
Droop, J. P., M.A. (Classical A.)		Williams, J. W. (Constrn.)
C. W. Jones Prof.		Junr. Lectr.
Peet, T. E., M.A. Ox. (Egyptology)		Allen, C. J. (Modelling)
Brunner Prof.		Recog. Teacher.

Penn, W. C. (Drawing from the Life) Instr.

*Art of the Theatre*  
Granville-Barker, H.  
Spl. Lectr., 1922.

*Astronomy*  
Plummer, W. E., M.A. Ox.,  
F.R.A.S. Reader.

*Bacteriology*, v. Med.

*Bio-Chemistry* [Johnston Prof.  
Ramsden, W., M.A., D.M. Ox.  
Coope, R., M.D., Ch.B., B.Sc.  
Junr. Lectr.

*Botany*  
Thompson, J. McLean, M.A., D.Sc.  
Glas., F.L.S.  
H. Gaskell Prof.  
..... Demr. & Lectr.  
Knight, Margery, M.Sc. „  
Fry, Phyllis, B.Sc., A.R.C.S.  
Demr. & Junr. Lectr.

*Celtic*, v. Welsh

*Chemistry*, v. also Bio-C.  
Baly, E. C. C., C.B.E., M.Sc.,  
F.R.S. (Inorg. C.) Grant Prof.  
Heilbron, I. M., Ph.D. Leip., D.Sc.  
Glas., F.I.C.  
H. Harrison Prof.  
Lewis, W. C. McC., M.A. Belf.,  
D.Sc., F.Inst.P. (Physical C.)  
Brunner Prof.  
Thomas, J. S., D.Sc. (Analyt. C.)  
Senr. Lectr.  
Kay, F. W., M.Sc. Manc., Ph.D.  
Berl. (Applied Organic C.)  
Senr. Lectr.

Junr. Lectrs. and Demrs. :  
Guthrie, F. C., M.A. (Inorg.).  
Edwards, D. M., B.Sc. (Inorg.).  
Griffith, R. O., M.Sc. (Phys.).  
West, Helen, M.Sc. (Organ.).  
Shutt, W. J., M.Sc. (Phys.).  
M'Keown, A., B.Sc. (Phys.).  
Doran, W., M.Sc., A.I.C. (Organ.).  
Keffler, L. P. G., M.Sc. (Inorg.).  
Nance, J. T., M.A. „  
Occleshaw, V. J., M.Sc. „

*Chemistry, Pub. Health*  
Roberts, W. H., M.Sc. Assoc. Prof.  
Jones, E. Gabriel, M.Sc., F.I.C.  
Lectr.

*Chinese*  
Parker, E. H., M.A. Manc. Reader.

*Civic Design*  
Abercrombie, L. P., M.A.,  
A.R.I.B.A. Prof.

Special Lectrs. :  
Brodie, J. A., Assoc. Prof., M.Eng.,  
M.I.C.E., M.I.M.E. (Civic  
Engin.).  
Kelly, S. A., F.S.I. (Civic Engin.).  
Ward, H. B., M.Sc., M.Eng.,  
A.M.I.C.E. (Civic Engin.).  
Mawson, T. H., (Landscape  
Design).  
Clarke, J. J., M.A. (Law of Hous-  
ing and Town Planning)

*Classics*  
Campbell, A. Y., M.A. Camb.  
(Greek) Gladstone Prof.  
Ormerod, H. A., M.A. Ox. Lectr.  
Slater, D. A., M.A. Ox. (Latin)  
Prof.  
Smiley, M. T., M.A. Dub. Lectr.  
Chapman, Dorothy, M.A. St. And.  
Lectr.  
Rees, Frances M., B.A. Wales  
Junr. Lectr.

*Commerce*  
Dewsnap, E. R., M.A. Manc.  
Chaddock Prof.  
Dumbell, S., B.A. Junr. Lectr.  
Taggart, P. (Accountancy)  
Spl. Lectr.  
Williams, A. (Banking) Spl. Lectr.

*Dentistry*, v. *infra*

*Economic Science*, v. also Com.  
..... Brunner Prof.  
Macdonald, R. A., M.A. Lectr.  
Parry, Eliz. A., M.A. Tutor.

*Education*  
Campagnac, E. T., M.A. Ox. Prof.  
Heath, A. E., M.A. Camb.  
Senr. Lectr.

Collie, Frances A., M.A. Wales  
Lectr.  
Kermode, Helen S., M.A. Lectr.  
Assts. in Method :  
Beszant, C. F.  
Tuckett, W. J., B.A. N.U.I.  
Williams, Catherine A.  
Milne, Susan.

*Engineering, v. infra*

*English Lang. and Philol.*

Mawer, A., M.A. Camb. and  
Durh. Baines Prof.

*English Lit.*

Elton, O., M.A. Ox., D.Litt. Durh.,  
LL.D. King Alfred Prof.  
Case, R. H., B.A. Lond.  
A. C. Bradley Prof.  
Trenery, Grace R., M.A.  
Junr. Lectr.

*Entomology* [Dutton Prof.]

Newstead, R., M.Sc., F.E.S.,  
A.L.S., F.R.S.  
Evans, Alwen M., M.Sc.  
Asst. Lectr.

*Fisheries, v. Ocean.*

*French*

Eggl, J. E., Ag. des L.  
J. Barrow Prof.  
Renault, G. E., B. ès A. Dijon  
Senr. Lectr.  
Deane, Eliz., B.A. Junr. Lectr.  
Nigot, G., Lic. ès Let.  
Junr. Lectr.  
Adde, Mlle. Yvonne, B. ès L.  
Tutor.  
Prieur, Mlle. S. Tutor.  
Laporte, Mlle. J. Tutor.

*Geography* [Rankin Prof.]

Roxby, P. M., B.A. Ox.  
Kinvig, R. H., M.A. Junr. Lectr.  
Winchester, Lily, M.A., F.R.Met.S.  
Junr. Lectr.  
Ellerton, M. K., Cartographer.

*Geology* [Herdman Prof.]

Boswell, P. G. H., O.B.E., D.Sc.  
Lond., M.I.M.M., F.G.S.  
Double, I. S., F.G.S.  
Junr. Lectr. & Demr.  
Neaverson, E., M.Sc., F.G.S.  
(Palæont.)  
Junr. Lectr. & Demr.

*German*

Collinson, W. E., M.A. Lond.,  
Ph.D. Prof.  
Picton, Ænid, B.A. Wales  
Junr. Lectr.

*Hebrew, v. Affild. Instns.*

*Hellenistic Gk., v. Affild. Instns.*

*History* [Senr. Lectr.]  
Jones, W. Garmon, M.A.

*Hist., Ancient* [Rathbone Prof.]  
Halliday, W. R., B.A., B.Litt. Ox.

*History, Eccl., v. Affild. Instns.*

*History, Mediæval*

Coopland, G. W., B.Sc. Lond.,  
M.A., Litt.D. Senr. Lectr.  
Howden, Marjorie P., M.A.  
Junr. Lectr.

*History, Modern*

Webster, C. K., M.A. Camb.  
A. Geddes & J. Rankin Prof.  
Veitch, G. S., M.A., Litt.D. (H.).  
Routledge, F. J., B.Litt. Ox., M.A.  
Lectr.

Lackland, Hilda M., M.A.

Junr. Lectr.

*Italian* [Senr. Lectr.]

Rébora, P., D.Litt. Turin

*Law, v. also Civic* [Q. Vict. Prof.]

Blease, W. Lyon, LL.M., Barr.-at-

Law, Dean of the Faculty

Batt, F. R., LL.M. (Comm. L.)

Prof.

Findlay, J., M.A. Ox.

Warr Mem. Lectr.

Jones, J. W., M.A., LL.M. (Crimi-

nal L., etc.) Lectr.

Thomas, H.H. Judge A. P., B.A.,

LL.D. Lond. (Internat. L.)

Prof.

Dowdall, H.H. Judge C., K.C.,  
M.A., B.C.L. Ox. (Eccles. L.)  
(H.).

*Mathematics*

Carey, F. S., M.A. Camb. Prof.  
Proudman, J., M.A. Camb., D.Sc.  
(Applied M.) Prof.  
Hargreaves, R., M.A. Camb.

Reader.

Street, R. O., M.A. Camb., M.Sc.  
(Maths. and M. Hydrography)

Lectr.

Wilson, B. M., B.A. Camb. Lectr.

Ince, E. L., M.A. Edin., B.A.  
Camb. and Dub., D.Sc. Lectr.

Boole-Stott, Alicia (H.).  
Grace, S. F., M.Sc. Junr. Lectr.

*Medicine, v. infra*

*Music*

Pollitt, A. W., Mus.D. Durh.,  
F.R.C.O., L.R.A.M., A.R.C.M.  
Lectr.

*Naval Archit., v. Engin.*

*Oceanography*

Johnstone, J., D.Sc. Lond. Prof.  
Daniel, R. J., B.Sc. Lectr.

Jenkins, J. T., D.Sc. Lond. and  
Wales, Ph.D. Kiel (Sea  
Fisheries) (H.).

Scott, A., A.L.S. (Econ. Ichthyol.)  
(H.).

Chadwick, H. C., A.L.S. (Marine  
Biol.) (H.).

*Palæography and Diplomatics*

Twemlow, J. A., B.A. Ox.  
Assoc. Prof.

*Parasitology*

Yorke, W., M.D. W. Myers Prof.  
Southwell, T., A.R.C.Sc., F.Z.S.

Asst. Lectr.

*Philosophy*

Mair, Alex., M.A. Edin. Prof.  
Field, G. C., M.A., B.Sc.

Senr. Lectr.

*Physics, v. also Chem.*

Wilberforce, L. R., M.A. Camb.  
L. Jones Prof.

Rice, J., M.A. Belf. Sr. Lectr.

Junr. Lectrs. and Demrs. :

Ablett, R., M.Sc.

Edwards, E., B.Sc. Wales, M.A.  
Tor.

Roberts, R. W., M.Sc.

Smith, J., B.Sc.

*Physiology*

Macdonald, J. S., M.A. Camb.,  
F.R.S. Holt Prof.

Duffield, F. A., M.B., Ch.B. Edin.  
Lectr.

Walker, C. E., D.Sc., M.R.C.S.,  
L.R.C.P. (Histology) Lectr.

2 Junr. Lectrs. and Demrs.

*Russian Studies*

Boswell, A. B., M.A.

Bowes Prof. of R. Hist.  
Lang. and Lit.

..... Asst.  
Williams, H. W., Ph.D. Mun. (R.  
Ethnog.) Research Fellow.

Slepchenko, B. S. Recog. Teacher.

*Social Studies*

Davies, Mary H. Ll., M.A. Lectr.

Parry, Eliz. A., M.A. Spl. Lectr.

*Spanish*

Peers, E. Allison, M.A. Camb. and  
Lond. Gilmour Prof.

Ruiz, N. G. Junr. Lectr.

*Vet. Science*

Share-Jones, J., D.V.Sc., M.Sc.,  
F.R.C.V.S. Dir. of Vet. Studies

Prof. of V. Anat.

Annett, H. E., M.B.E., M.D.,  
D.P.H. (H.).

Elam, C. W., D.V.H., M.R.C.V.S.  
Lectr.

Hughes, H. V., M.R.C.V.S.,  
D.V.H. Junr. Lectr.

McLean, J., M.R.C.V.S.  
Junr. Lectr.

Maguire, J., M.R.C.V.S.  
Clin. Lectr.

Walker, A., F.R.C.V.S. Lectr.

Warburton, F. T., M.R.C.V.S.  
Clin. Lectr.

## ENGLAND

### *Welsh*

vies, J. Glyn, M.A. Senr. Lectr.  
 en, E., Bar.-at-Law, F.S.A.  
 Welsh Mediæval Antiq.) Reader.

*Zoology*, v. also Entom., Ocean.  
 kin, W. J., D.Sc., F.L.S.

Derby Prof.  
 sbee, Ruth C., M.Sc.

Lectr. & Demr.  
 rfield, S. T., B.A., M.Sc. „

rdham, Mahalah G. C., B.Sc.  
 West. Aus.

Junr. Lectr. & Demr.

### Engineering

tkinson, W. H., M.Eng.,  
 M.I.C.E., M.I.M.E., M.I.E.E.  
 Harrison Prof.

son, W., D.Sc. Manc., M.I.C.E.,  
 A.M.I.M.E. (Strength of  
 Materials) Hughes Prof.

oles, G. E., M.B.E., M.Sc.  
 Manc., M.I.A.E. (Thermo-  
 dynamics) Rankin Prof.

ton, E. P., B.Sc. Manc., B.Eng.,  
 A.M.I.M.E. Lectr.

wson, H., D.Sc. (Eng.) Lond.,  
 A.R.C.S., A.M.I.C.E.,  
 A.M.I.M.E. Lectr.

ll, J., M.Eng., M.I.A.E. Lectr.

urton, W. J., A.M.I.N.A. Lectr.

z, E. B., B.Sc. Bris. Lectr.

mer, A., B.Eng. Lectr.

th, G., B.Sc. Jr. Lectr.

### *Civil Engineering*

rott, S. W., M.A.I. Dub.,  
 M.I.C.E. Prof.

mer, E. J., M.Eng., Barr.-at-  
 Law (Contracts, etc.)

Spl. Lectr.  
 taker, H. A., B.Eng. Lectr.

*Design, etc.*, v. also Refrigeration

k, J. J., B.Eng., A.M.I.M.E.  
 Lectr. & Demr.

hens, A. P., B.Eng.,  
 A.M.I.C.E. Lectr. & Demr.

Webster, F., M.C., M.Eng.,  
 A.M.I.C.E. Lectr. & Demr.

Dixon, B. J., A.R.C.Sc.I.  
 Junr. Lectr.

*Dock and Harbour Engineering*  
 Wilton, T. R., M.A. Camb.,  
 M.I.C.E. Assoc. Prof.

*Electrical Engineering*  
 Marchant, E. W., D.Sc. Lond.,  
 M.I.E.E. Jardine Prof.

Teago, F. J., M.Sc. Durh.,  
 A.M.I.E.E. (Elect. Machin-  
 ery) Lectr.

Prescott, J. C., M.Eng., A.M.I.E.E.  
 Lectr.

Waygood, O. C., A.M.I.E.E.  
 Lectr.

Brookes, R. C., B.A. Camb.,  
 A.M.I.E.E. Junr. Lectr.

Bennett, J. E., M.A. Camb.,  
 A.M.I.E.E. Junr. Lectr.

Morgan, E. H. Demr.

*Marine Engineering*  
 Lectrs.: The Harrison Prof. of E.,  
 the Prof. of Nav. Arch., the  
 Prof. of Refrig., etc.

*Metallurgy* [Wortley Prof.  
 Bannister, C. O., A.R.S.M., F.I.C.  
 Newcombe, J. A., R.S.M. Lectr.

*Municipal Engineering*  
 Brodie, J. A., M.Eng., M.I.C.E.,  
 M.I.M.E. Assoc. Prof.

*Municipal Electrical Engineering*  
 ..... Assoc. Prof.

*Naval Architecture*  
 Abell, T. B., O.B.E., M.Eng.,  
 R.C.N.C. (ret.), M.I.N.A.

A. Elder Prof.  
 Wilson, J. C. M., R.N.C., A.M.I.N.A.  
 Lectr. & Demr.

*Railway Engin.* [Assoc. Prof.  
 Aspinall, Sir J. A. F., D.Eng.,  
 M.I.C.E., M.I.M.E.

*Refrigeration*  
 Anderson, J. W., M.Eng., M.I.C.E.,  
 M.I.M.E. (also Lectr. on De-  
 sign) Hughes Prof.



Medicine (for subjects of first 2  
yrs.—Anat., etc., v. *supra*)

*Bacteriology*

- Beattie, J. M., M.A. N.Z., M.D.,  
C.M. Edin. Prof.  
Ashcroft, L. S., M.B., Ch.B.,  
D.P.H. Lectr.  
Lewis, F. C., M.R.C.S., L.R.C.P.,  
(Bact. Methods) Lectr.  
Fitch, A. A., M.R.C.S., L.R.C.P.  
Lectr.

*Cytology*

- Walker, C. E., D.Sc., M.R.C.S.,  
L.R.C.P. Assoc. Prof.  
Tozer, Frances, B.Sc. Lond. Lectr.

*Dermatology*

- [Lectr.  
Leslie-Roberts, H., M.D. Edin.

*Diseases of Children*

- Fordyce, A. D., M.D. Edin.,  
F.R.C.P. Lectr.

*Diseases, Infectious*

- Rundle, C., O.B.E., M.D. Lond.,  
D.P.H. Lectr.

*Diseases, Mental*

- ..... Lectr.

*Diseases, Specific*

- Wilson, F. P., M.D., M.Sc. Lectr.

*Forensic Medicine*

- [Prof.  
Buchanan, R. J. M., M.D., F.R.C.P.  
MacFall, J. E. W., M.D., D.P.H.  
(Toxicol.) Lectr.

*Hygiene*

- Hope, E. W., O.B.E., M.D., D.Sc.  
Edin. Prof.  
Mussen, A. A., B.A., M.D. Dub.,  
D.P.H. (Practical San.) Lectr.  
Hanna, W., M.A., M.D. Belf.,  
D.P.H. (Admn. and Vaccn.)  
Lectr.

*Laryngology*

- Permewan, W., M.D. Lond.,  
F.R.C.S., D.P.H. Lectr.

*Mat. Med. and Pharm.*

- Marsden, P. H., F.C.S. Lectr.  
Allan, J. S., M.P.S. (H.) Demr.

*Medicine*

- Abram, J. Hill, M.D. Lond.,  
F.R.C.P. Prof.

*Clinical Lectrs.:*

- Abram, J. Hill, M.D. Lond.,  
F.R.C.P.  
Buchanan, R. J. M., M.D. Vict.,  
F.R.C.P.  
Bigland, A. D., B.A. Camb., M.D.  
Hay, J., M.D., F.R.C.P.  
Bligh, J. Murray, M.D.  
Gullan, A. G., M.D. Lond.,  
F.R.C.S.  
Macalister, O. J., M.D. Edin.,  
F.R.C.P.  
Roberts, J. LL., M.D., B.S., B.A.,  
B.Sc. Lond., F.R.C.S.

*Midwifery and Gynæc.*

- Bell, W. Blair, M.D., B.S. Lond.  
Prof. and Clin. Lectr.  
Hendry, R. A., M.D., Ch.B. (Obst.  
and Gyn.) Lectr.

*Clin. Lectrs.:*

- Gemmell, J. E., M.B., C.M. Edin.  
Ivens, Frances, M.B., M.S. Lond.  
Murray, H. Leith, M.D. Aberd.  
Willett, J. H., M.D.

*Neuro - Pathology of Mental  
Diseases*

- Watson, G. A., M.B., C.M. Edin.  
(H.).

*Ophthalmology*

- Bickerton, T. H., Ch.M. Lectr.

*Pathology*

- Glynn, E. E., M.A., M.D., C.M.  
Camb., F.R.C.P. Holt Prof.  
..... Lectr.  
..... Junr. Lectr.  
Pemberton, H. S., M.B., Ch.B.  
Demr.

*Pharmacology*, v. also Mat. Med.

- Dilling, W. J., M.B., Ch.B. Aberd.  
Lectr.

*Radiology*

- Holland, C. Thurstan, D.L.,  
M.R.C.S., L.R.C.P. Lectr.

*Surgery*

Parker, R., M.B., B.S. Lond.,  
F.R.C.S. Prof.

Kelly, R. E., C.B., M.D., B.Sc.,  
F.R.C.S. (Practical S.)

Prof. and Clin. Lectr.

Jones, Sir Robert, C.B., K.B.E.,  
Ch.M., D.Sc., F.R.C.S. (Or-  
thopædics)

Lady Jones Lectr.

Monsarrat, K. W., M.B., C.M.  
Edin. (Operative S.)

Lectr. and Clin. Lectr.

Kennon, R., M.D., F.R.C.S.  
Demr.

Other Clinical Lectrs. :

Armour, T. R. W., M.B., C.M.  
Edin., F.R.C.S.

Douglas-Crawford, D., M.B., C.M.  
Edin., F.R.C.S.

Evans, A. J., F.R.C.S. Edin.

Heaney, F. Strong, M.D. Dub.,  
F.R.C.S.I.

Jones, T. C. Litler, F.R.C.S.

Newbolt, G. P., C.B.E., M.B. Durh.,  
F.R.C.S.

Simpson, G. C. E., B.A., M.B.,  
B.C. Camb., B.Sc., F.R.C.S.

*Therapeutics*

..... Prof.

*Tropical Med.*

Stephens, J. W. W., B.A., M.D.,  
D.P.H. Camb.

Sir A. Jones Prof.

Thomas, H. W., M.D., C.M.,  
Director of Research at  
Manaos (Yellow Fever).

3 Research Assts.

*Tropical Diseases of Africa*

Blacklock, D. B., M.D. Edin.,  
D.P.H. Prof., and Dir. of  
Sierra Leone Research Lab.

*Tropical Sanitation*

Prout, W. T., C.M.G., M.B., C.M.  
Edin. (H.).

*Vaccination, v. Hygiene**Dentistry**Dental Surgery*

Gilmour, W. H., M.D.S., L.D.S.  
(Dir. of D. Educn.)

Cohen Prof.

Brown, I. W., B.A. Belf., L.D.S.  
Demr.

Collinge, J. S. H., L.D.S. Demr.

*Anæsthetics*

..... Lectr.  
Clothier, B., L.D.S. Demr.

*D. Anat., Histol., and Physiol.*

Woods, J. A., M.D.S., L.D.S.  
Lectr.

Livingston, A., M.D.S., M.B., Ch.B.  
Demr.

*D. Mechanics*

Osborn, L. J., M.D.S., L.D.S.  
Lectr.

Newton, A. S., L.D.S. Demr.

*D. Metallurgy*

Bannister, C. O., A.R.S.M. Lectr.

*Operative D. Surgery*

Bennette, H. W. P., M.D.S.,  
L.D.S. Lectr.

Wilkinson, F. C., M.D., B.D.S.  
Demr.

*Clin. D. Surgery*

9 Lectrs.

*Orthodontia*

Mountford, E. H., L.D.S. Lectr.  
Watkin, H. G., L.D.S. Demr.

*Adult Education*

Secy. to the Univ. Extension  
Board :

G. S. Veitch, M.A., Litt.D.

## ASSOCIATED AND AFFILIATED INSTITUTIONS

INSTITUTE OF ARCHÆOLOGY, Abercromby Square, Liverpool. Associated Teachers additional to the staff of the Faculty—*Assyriology*, Pinches, T. G., LL.D.; *Numismatics*, Milne, J. G., M.A.; *Central American Arch.*, Gann, T. W. F., M.R.C.S., L.R.C.P.

T. AIDAN'S COLLEGE, Birkenhead. Principal, Rev. R. T. Howard, M.A. d. for first year of degree course and, in subjects in which instruction is provided in the Univ., up to half of the entire course for the B.A.

Recognized Teachers in—*Hellenistic Greek*, Dowding, A. T. W., B.A.; on, H. W. S., B.A.; *Eccl. Hist.*, Wood, T. J., M.A.; *Hebrew*, Keith, K. E.,

DGE HILL TRAINING COLLEGE. Principal, Miss E. M. Smith. Recognized Teachers in—*Maths.*, Smith, Miss E. M.; *English Lit.*, Deakin, Miss M. H.,

OUNT PLEASANT TRAINING COLLEGE. Principal, Miss C. Holcroft, B.A. Recognized Teachers in—*Latin*, Sampson, Miss M., M.A.; *English Lit.*, ey, Miss M. J., B.A.

HE HARRIS INSTITUTE, Preston. First year of Degree Course (Engineering).

SCHOOL OF TROPICAL MEDICINE, Pembroke Place, Liverpool. New laboratories opened 1920. Ward for Tropical Diseases at Royal Infirmary, Liverpool. Departments with research laboratories at Manaos and Sierra Leone. For training in the conduct of original research and organization of prophylactic measures. Has sent out numerous expeditions to tropical tries. Publishes *Memoirs* and *Annals*. For staff, v. *supra*—Trop. Med., San., Parasit., Entom., Hygiene. Diploma course, 3 months.

ATHOLOGICAL LABORATORY, County Asylum, Rainhill. *Pathologist*, son, G. A., M.B., C.M.

## GENERAL INFORMATION

University College, Liverpool, founded by Royal Charter 1881, was admitted to the Victoria University, Manchester, in 1884. In 1903 the University of Liverpool was established by Royal Charter and the College was absorbed

BRARY, MUSEUMS, ETC. The library of the Univ. contains about 90,000 volumes and includes the Rylands collection of early works on Geog. and Astron., 100 incunabula, and the final sheets of the "Constitutiones" of Clement printed at Mainz in 1460. In addition there are twenty-three Class Libraries in the Faculty of Arts and External Departmental Libraries for the Medical and Science Departments. MUSEUMS AND LABORATORIES: Anat., Zool. (including a unique Hittite collection), Archit., Bact., Bio-Chem., Bot., Phys., Physical and Electro-Chem., Electricity (Applied), Embryol. and Physics, Engin. (including facilities for aerial motor and propeller testing and wind experiments), Geol., Hygiene, Laryngology, Materia Medica, Expl. Trop. Med. (including museum, animal houses, and specially warmed insectarium, and research labs. at Liverpool, Sierra Leone and Manaos), and Gynæc., Oceanog., Ophth., Path., Physics, Physiol. and Histol., Path., Tidal Research, Toxicology, Vet. Anat. and Path., Zool. The Port (Isle of Man) Marine Biol. Lab. has been transferred to the Univ. by an Act of Tynwald. HOSPLS. available for Clinics, 4 general and 6 special, containing 140 beds, which together constitute the clinical school. The trade of the Univ. ensures frequent importations of infection. Special wards for Tropical diseases. Expeditions to Tropical countries organized for investigation or research. Suitably qualified persons may enter the Laboratories for research at prescribed fees.

DEGREE COURSES: 3 yrs., B.A., B.Com., B.Sc., LL.B.; 3 or 4 yrs., B.Eng. (*plus* 2 yrs.' app'r'ship); 5 yrs., B. Arch., M.B., Ch.B., B.D.S., B.V.Sc.

The B.Com. courses include (1) General Business; (2) Banking, Insurance, Accounting; (3) Transport, Railways, Shipping; (4) Consular Service.

The LL.B. courses prepare for the Bar and solicitors' examns. as well as for the Degree. The B.V.Sc. may be taken concurrently with the M.R.C.V.S.

HIGHER DEGREES: Ph.D., v. p. 15. (1) *Graduates of Liverpool in Faculty concerned*. Obtainable after Bachelorship: 1 yr., M.Sc.; 15 mos., M.Ch. Orth.; 2 yrs., M.A., M.D., Ch.M., M.H. (Hygiene), M.D.S., M.V.Sc., LL.M., M.Eng. After Mastership: 5 yrs., D.Litt., D.V.Sc., LL.D. After Mastership or Ph.D.: 5 yrs., D.Sc., D.Eng. (2) *Graduates of approved Univs.* After Bachelorship and 2 yrs. higher study or research in Liv. Univ.: M.A. (1 yr. elsewhere), M.Sc., M.D., M.H., M.V.Sc., LL.M., M.Eng. The M.A. is also open under same conditions to grads. in Liv. Univ. of a Faculty other than Arts. (3) *Non-Graduates*. After 3 yrs. higher study or research in Liv. Univ.: M.A. (1 yr. elsewhere), M.Sc., LL.M.; 2 yrs., M.Eng.

The M.Ch. Orth. is open to grads., other than Med., of this or approved Univs. who are F.R.C.S. (Eng., Ed., or I.) or Fellows of the American Coll. of Surg.

DIPLOMAS. Archæol., 1 yr. course; Archit., 5 yrs.; Civic Design, 1 yr.; Commerce, 3 yrs.; Social Studies, 1 or 2 yrs.; Educn. (for grads.), 1 yr.; L.D.S., 4 yrs.; D.P.H., 9 mos.; D.T.M., 3 mos.; D.M.R.E., 2 terms; D.V.H., 6 mos.; Engin. (regulations under revision).

CERTIFICATES. Archaeol., 2 yrs.' course; separate Arts subjects, 2 yrs.; Archit., 3 yrs.; Archit. Design, 1 yr.; Civic Design, 2 terms; Social Studies, 1 or 2 yrs. (qualification for entry lower than for Diploma course); Educn., 1 yr.; Engin., 2 or 3 yrs.; Univ. extension courses, 3 yrs.

FEES. For Matricn. £2. Guild of Undergrads. £2 p.a. Tuition: DEGREE COURSES: B.A., or B.Com. (3 yrs.), £90; M.A. (sessional), £5; B.Arch. (5 yrs.), £150; B.Sc. (3 yrs.), £105-£120; M.Sc. (sessional), Maths., £5; other subjs., £10; M.B., Ch.B. (5 yrs.), £196; M.D. (sessional), £10; Ch.M. (2 yrs.), £20; M.H. (2 yrs.), £80; M.Ch. Orth. (15 mos.), £41; B.D.S. (5 yrs.), £237; M.D.S. (1 yr.), £20; B.V.Sc. (5 yrs.), £175; LL.B. (3 yrs.), £67; LL.M. (sessional), £5; B.Eng. (3 or 4 yrs.), £144-£192; M.Eng. (Research), £10; Ph.D. (2 yrs.), £27; Grads. of other Univs. and Non-grads. pay £10 addnl. in M.A., M.Sc., LL.M. courses. Apparatus fee per session, M.Sc., M.Eng., Ph.D. in Chem., £20, other subjects except Maths., £10. DIPLOMA COURSES: Archit. (5 yrs.), £150; Civ. Des. day, £35; eveng., £15; Educ. (1 yr.), £20; Com. (3 yrs.), £90; Soc. Studies (2 yrs.), £25; Archæol. (1 yr.), £10; Conj't Bds. of P. & S. (5 yrs.), £174; D.P.H. (9 mos.), £40; D.T.M. (3 mos.), £21; D.M.R.E. (2 terms), £24; 5s.; L.D.S. Liv., incl. pupilage (4 yrs.), £199; M.R.C.V.S. (4 yrs.), £120; D.V.H. (6 mos.), £21; Eng., £144-£192. CERTIFICATE COURSES: Archit. (3 yrs.), £105; Archit. Des. (1 yr.), £35; Civ. Des. (2 terms), £10; Soc. Studies (2 yrs.), £25; Archæol. (2 yrs.), £30; Educ. (1 yr.), £20; Engin. (2 or 3 yrs.), £96-£144.

EXAMN. FEES. M.B. and Ch.B., B.V.Sc., B.D.S., £15; B.Arch., £5; other bachelor degrees, £4; Master's degree (examn. or on application), M.H., 10 gs.; Ch.M., M.V.Sc., M.D.S., £5; others, £3; Doctor's (on application), £10. Diploma examns., L.D.S., £15; Comm., £4; Archæol., £3; Educn., Soc. Studies, Eng., £2; others, £5 or 5 gs. Certifis. Examns., Archit., £5; Eng., £4; others, £2. Degree Admission Fees, £5. Dipl. or Certif. fee, £1.

**SCHOLARSHIPS, ETC., FOR GRADUATES.** Research Fellowships and Scholarships of the aggregate value of over £6000 are offered annually in all faculties; Garrett International Fellowship for Research in Bact., Path., or Physiol. open to members of Univs. and Med. schools in the U.S.A. and of other foreign schools, £100 for 1 yr. with possible extension 2 yrs. (applications by May 31); Johnston Colonial Fellowship of same value, for research in Bio-Chem. with teaching, open to members of Colonial Univs. and Med. Schools, not excluding Colonial candidates with British qualifications (applications by May 31); Lloyds' Register Scholps. in Naval Archit., £100 p.a. for 3 yrs. for British subjects, men, not over 23.

**RESIDENCE, ETC.** Two hostels for 83 men (fees, £81); one for about 90 women (fees from £69). Students' Union Club House cost £20,000.

A UNIVERSITY EXTENSION Board is responsible for extra-mural work. There are travelling libraries for local centres.

**PUBLICATIONS.** *Calendar* (Oct.), 2s. 6d.; *Diary* (Oct.), free; *Prospectuses of Faculties and Schools*, July, free; *Students' Handbook* (Oct.), free; *Inaugural Lectures*; *Report of the Senate upon Research*. Issued in 1920, *inter alia*, *School of Tropical Medicine Historical Record*, 1898-1920, 10s. 6d.

## THE YEAR 1921-22

**BENEFACTIONS.** Dr. Samuels bequest, £1500 for endowment of post-grad. scholps. (Med.); Mrs. Hugh R. Rathbone, £1000 for equipment of Hostels; Misses A. M. and A. L. Sinclair, £1000 for Scholp.; C. Sydney Jones, £250 for Dept. of Educn.; C. de Trey, £500 for Dental Research and £917 for Dental equipment.

**NEW BUILDINGS, ETC.** First wing of new chemical Labs. completed and equipped. Four additional houses, purchased and equipped as Hostels for men. Athletic grounds enlarged and improved at a cost of £25,000 (Geoffrey Hughes donation).

**LEGISLATION.** Requirements for degrees of Doctor and Master revised and made more uniform. New degree of M.Arch., and a Certificate in Educn. New rules (a) requiring Candidates for B.A. who fail in the first year's examn. in more than one subject to spend an addnl. year; (b) enlarging Early English course by including Literature; (c) requiring session's work as well as examn. to be considered in awarding marks in B.A. examns.; (d) assimilating various B.Sc. Honours Schools particularly in relation to qualifications for entrance; (e) revising and co-ordinating courses for B.Eng. degrees; (f) introducing Honours for B.D.S.

**NUMBER OF STUDENTS.** Reading for Bachelorship, 1654, including 517 women; for diplomas and certificates, 492 (w., 49); research or higher degrees, 339 (w., 100). Occasional, 133 (w., 84).

**DEGREES AND DIPLOMAS CONFERRED.** B.A.—124; B.Sc.—158; M.B., Ch.B.—52; LL.B.—15; B.Eng.—121; B.Arch.—9; B.Com.—16; B.D.S.—2; M.A.—10; M.Sc.—20; M.D.—1; M.Eng.—12; Ph.D.—9. Diplomas: D.P.H.—19; D.T.M.—15; L.D.S.—40; D.M.R.E.—3; others, 38.

**ADULT EDUCATION.** Lectures and classes in 17 centres. Tutorial Classes, 48 of 3 or 4 sessions (1337 students).

SUMMER SCHOOL IN SPANISH. Attended by 85 students. At close of School 14 students accompanied Prof. to Spain for continuation course at Santander.

RETIREMENTS. Profs. : Sir J. G. Frazer, T. R. Glynn, C. A. Pearson, W. Thelwall Thomas, C. K. Webster ; Lectrs. : L. Abercrombie, T. P. Cowen, J. Smeath Thomas, G. H. Turnbull.

# UNIVERSITY OF LONDON

VISITOR—H.M. THE KING IN COUNCIL.

CHANCELLOR—Rt. Hon. EARL OF ROSEBERY AND MIDLOTHIAN, K.G.,  
K.T., D.C.L., etc.

VICE-CHANCELLOR—H. J. WARING, M.S., M.B., B.Sc., F.R.C.S.

CHAIRMAN OF CONVOCATION—R. M. WALMSLEY, D.Sc., M.I.E.E.

PRINCIPAL OFFICER—Sir E. COOPER PERRY, M.A., M.D., F.R.C.P.

ACADEMIC REGISTRAR—EDWIN DELLER, LL.D.

REGISTRAR OF THE COUNCIL FOR EXTERNAL STUDENTS—G. F. GOOD  
CHILD, M.A., B.Sc.

REGISTRAR OF THE UNIVERSITY EXTENSION BOARD—J. LEA, M.A.

SECRETARY TO THE SENATE—P. M. WALLACE, M.A.

FINANCIAL OFFICER—.....

SUPERINTENDENT OF EXAMINATIONS—R. ROSCOE, B.A.

GOLDSMITHS' LIBRARIAN—R. A. RYE.

REPRESENTATIVE IN PARLIAMENT—Sir SYDNEY RUSSELL-WELLS, M.D.

## INCORPORATED COLLEGES, SCHOOLS OF THE UNIVERSITY, AND INSTITUTIONS HAVING RECOGNIZED TEACHERS

Opposite each is shown the index letter or letters or number by which the institution is referred to in the subsequent part of this section.

### INCORPORATED COLLEGES

UNIVERSITY COLLEGE	(U).	KING'S COLLEGE	(K.).
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### INCORPORATED INSTITUTIONS AND UNIVERSITY DEPARTMENTS

GOLDSMITHS' COLLEGE.

BROWN ANIMAL SANATORY INSTN.

PHYSIOLOGICAL LABORATORY.

COMMERCE DEGREE BUREAU AND  
APPOINTMENTS BOARD.

FRANCIS GALTON LABORATORY FOR  
NATIONAL EUGENICS.

BARTLETT SCHOOL OF ARCHITECTURE.

INSTITUTE OF HISTORICAL RE-  
SEARCH.

## SCHOOLS OF THE UNIVERSITY

IMPERIAL COLLEGE	(Im.).	
EAST LONDON COLL.	(EL.).	
BIRKBECK COLL.	(Bk.).	
LONDON SCHOOL OF ECONOMICS	(E.).	
S.E. AGRIC. COLL., WYE	(Ag.).	
LONDON DAY TRAINING COLL.	(Tr.).	
SCHOOL OF ORIENTAL STUDIES	(O.).	
<i>Women's Colleges</i>		
KING'S COLL. FOR WOMEN, HOUSEHOLD AND SOCIAL SCIENCE DEPT.	(KH.).	
BEDFORD COLL. FOR WOMEN	(BW.).	
ROYAL HOLLOWAY COLL.	(Ho.).	
WESTFIELD COLL.	(Wf.).	
<i>Theological</i>		
NEW COLL., HAMPSTEAD	(N.).	
HACKNEY COLL., HAMPSTEAD	(H.).	
REGENT'S PARK COLL.	(R.).	
KING'S COLL. THEOL. DEPT.	(KT.).	
WESLEYAN COLL., RICHMOND	(WR.).	
ST. JOHN'S HALL, HIGHBURY	(J.).	
	<i>Medical</i>	
	ROYAL ARMY MED. COLLEGE	(AM.).
	ST. BART.'S HOSP. MED. COLL.	(B.).
	CHARING CROSS HOSPL. MED. SCH.	(C.).
	ROY. DENT. HOSPL. AND LOND. SCH. OF DENT. SURG.	(D.).
	GUY'S HOSPL. MED. SCH.	(G.).
	KING'S COLL. HOSPL. MED. SCH.	(KM.).
	LONDON HOSPL. MED. COLL.	(L.).
	LISTER INSTITUTE	(LI.).
	LONDON (R.F.H.) SCH. OF MED. FOR WOMEN	(LW.).
	MIDDLESEX HOSPL. MED. SCH.	(M.).
	NAVAL MED. SCH., GREENWICH	(NM.).
	ST. GEORGE'S HOSPL. MED. SCH.	(SG.).
	ST. MARY'S HOSPL. MED. SCH.	(SM.).
	ST. THOMAS'S HOSPL. MED. SCH.	(T.).
	LONDON SCH. OF TROP. MED.	(TM.).
	UNIV. COLL. HOSPL. MED. SCH.	(UM.).
	WESTMINSTER HOSPL. MED. SCH.	(W.).

## INSTITUTIONS HAVING RECOGNIZED TEACHERS

- |  |  |
|--|--|
| (1) GOLDSMITHS' COLL.*                   | (17) ST. MARK'S COLL., CHELSEA.                  |
| (2) BATTERSEA POLYTECHNIC.               | (18) ROTHAMSTED EXPERIMENTAL<br>STATION.         |
| (4) CITY OF LONDON COLL.                 |  |
| (5) FINSBURY TECHNICAL COLL.             | (19) ROYAL ACADEMY OF MUSIC.                     |
| (6) JEWS' COLL.                          | (20) ROYAL COLL. OF MUSIC.                       |
| (7) NORTHAMPTON POLYT. INST.             | (21) TRINITY COLL. OF MUSIC.                     |
| (8) NORTHERN POLYT. INST.                |  |
| (9) ROYAL VETERINARY COLL.               | (22) PHYSIOL. LAB. OF THE UNIV.*                 |
| (10) SIR JOHN CASS TECH. INST.           | (23) BETHLEM ROYAL HOSPL.                        |
| (11) CHELSEA POLYT.                      | (24) HOSPL. FOR CONSUMPTION.                     |
| (12) WEST HAM MUNICIPAL COLL.            | (25) HOSPL. FOR SICK CHILDREN.                   |
| (13) WOOLWICH POLYTECHNIC.               | (26) NAT. HOSPL. FOR PARALYSED<br>AND EPILEPTIC. |
| (14) MARIA GREY TRAINING COLL.           | (27) ROYAL LOND. OPHTHALMIC<br>HOSPL.            |
| (15) ST. MARY'S COLL., PADDINGTON.       | (28) SCH. OF PHARMACY.                           |
| (16) BOROUGH ROAD COLL., ISLE-<br>WORTH. |  |

\* Incorporated in the Univ.





Briggs, M. S., F.R.I.B.A. (U).  
Richardson, A. E., F.R.I.B.A.

Prof. (U).

Stratton, A. J., F.R.I.B.A., F.S.A.  
Reader (U).

*Art (Fine Art)*

Borenus, C. T., Ph.D. Hels. (Hist.  
of Art) Prof. (U).

Marriott, F., A.R.C.A., A.R.E. (I).

Porter, A. T., M.A. Camb. (U).

Russell, W. W., A.R.A.

Asst. Prof. (U).

Tonks, H., F.R.C.S.

Slade Prof. (U).

*Astronomy*, v. Physics

*Aviation*, v. Engineering

*Banking and Currency*

..... Cassel Prof. (E).

*Bibliography*, v. Engl.

*Bio-Chemistry*, v. also Chem.

Drummond, J. C., D.Sc., F.I.C.  
Prof. (U).

Harden, A., D.Sc. Manc., Ph.D.  
Erl., F.R.S. Prof. (LL).

Ryffel, J. H., M.A., B.Ch. Camb.,  
B.Sc., F.I.C. (recogd. in  
Forensic Med.) Reader (G).

*Biology*, v. also Zool.

Esdaile, Philippa C., D.Sc. Manc.  
Reader (KH).

Evans, T. J., M.A. Ox. (G).

Leigh-Sharpe, W. H., B.Sc. (SM).

Mudge, G. P., A.R.C.S. (L., LW).

Rushton, W., A.R.C.S. (T).

Shore, T. W., O.B.E., M.D., B.Sc.  
(B).

Woodger, J. H., B.Sc.  
Reader (M).

*Botany*

Blackman, V. H., M.A., Sc.D.  
Camb., F.R.S. (Im).

Cutting, E. M., M.A. Camb. (U).

Delf, Ellen M., B.A. Dub., D.Sc.,  
F.L.S. Reader (Wf).

Drabble, F., D.Sc. Lond. & Shef.,  
A.R.C.S., F.L.S. (8).

Farmer, J. B., M.A., D.Sc. Ox.,  
LL.D. Edin., F.R.S. (Im).

Fritch, F. E., Ph.D. Mun., D.Sc.,  
F.L.S. (EL).

Garside, S., M.Sc. Manc. (B).

Gates, R. R., M.A. Mt. All., B.Sc.  
McG., Ph.D. Chic., F.L.S.

Prof. (K).

Groom, P., M.B.E., M.A. Ox. and  
Camb., D.Sc. Ox., B.Sc.

Birm., F.L.S. (Im).

Gwynne-Vaughan, Dame H. C. I.,  
D.B.E., LL.D. Glas., D.Sc.,  
F.L.S. Prof. (Bk).

Haas, P., Ph.D. Freib., D.Sc.

Reader in Plant Chem. (U).

Halket, Ann C., B.Sc. (BW).

Hill, T. G., A.R.C.S., F.L.S. (Plant  
Physiology) Reader (U).

Lacey, H. B., F.L.S. (II).

Neilson-Jones, W., M.A. Camb.

Prof. (BW).

Oliver, F. W., M.A. Camb., D.Sc.,  
F.R.S. Quain Prof. (U).

Parkinson, S. T., B.Sc. (*Agric. B.*)

(Ag).

Salisbury, E. J., D.Sc., F.L.S. (U).

Salmon, E. S.

Reader in *Mycology* (Ag).

Wallis, T. E., B.Sc., F.I.C. (28).

*Chemistry*, v. also Bio-Chem.

Allmand, A. J., D.Sc. Liv.  
Prof. (K).

Arnall, F., M.Sc. (II).

Baker, H. B., C.B.E., M.A., D.Sc.

Ox., F.R.S. (Im).

Barnett, E. de B., B.Sc. (10).

Barrow, F., M.Sc. Birm., Ph.D.  
Stras. (Bk).

Boyle, Mary, D.Sc. (Ho).

Brady, O. L., B.A. Cape, D.Sc. (U).

Burke, Katharine A., B.Sc. (U).

Candy, H. C. H., B.A., B.Sc.,  
F.I.C., F.C.S. (L).

Clough, G. W., D.Sc. Birm. (9).

Coleman, J. B., A.R.C.S., F.I.C.,  
F.C.S. (II).

Cremer, H. W., B.Sc., A.I.C.  
(Inorg. C.) (K).

Crompton, H., F.C.S., A.C.G.I.

Reader (BW).

# LONDON

- Dean, G., M.A. Camb. (12).  
 Donnan, F. G., C.B.E., M.A.  
     R.U.I., Ph.D. Leip., D.Sc.  
     Liv., F.R.S. Prof. (U.).  
 Drakeley, T. J., Ph.D., M.Sc.,  
     F.C.S., A.I.C. (8).  
 Eldridge, A. A., B.Sc., F.I.C. (Im.).  
 Evans, H. J., B.Sc., F.I.C. (U.).  
 Field, S., A.R.C.S. (Applied C.) (7).  
 Garner, W. E., M.Sc. Birm. and  
     Lond. (U.).  
 Gibson, C. S., O.B.E., M.A. Ox.  
     and Camb., B.Sc. Ox., M.Sc.  
     Manc., F.I.C. Prof. (G.).  
 Goodwin, W., M.Sc. Manc., Ph.D.  
     Gött. (*Agric. C.*) (Ag.).  
 Harwood, H. F., M.Sc. Manc.,  
     Ph.D. Heid. (Im.).  
 Hurtley, W. H., D.Sc. Reader (B.).  
 Ingold, C. K., D.Sc. (Im.).  
 Keane, C. A., D.Sc. Manc., Ph.D.  
     Erl., F.I.C. (10).  
 Kenyon, J., D.Sc., F.I.C. (2).  
 King, A. T., B.Sc. (Im.).  
 Lowe, F. H., M.Sc. Manc. (11).  
 McKie, Phyllis, M.Sc., Ph.D.  
     Wales (B.).  
 Masson, J. I. O., M.Sc. Melb.  
     Reader in Inorg. C. (U.).  
 Masters, Helen, B.Sc. (KH.).  
 Melland, G., M.Sc. Manc.,  
     A.R.S.M., F.I.C. (13).  
 Moore, T. S., M.A. Ox., B.Sc.  
     Prof. (Ho.).  
 Myddleton, W. W., M.Sc. Belf.  
     (Bk.).  
 Partington, J. R., M.B.E., D.Sc.  
     Manc. Prof. (EL.).  
 Patterson, W. H., M.Sc. Manc.  
     (EL.).  
 Philip, J. C., O.B.E., M.A., D.Sc.  
     Aberd., Ph.D. Gött., F.R.S.  
     (Im.).  
 Pickard, R. H., B.Sc. Birm., Ph.D.  
     Munich, D.Sc., F.R.S. (2).  
 Plimmer, R. H. A., D.Sc. Prof. (T.).  
 Pope, F. G., D.Sc. Reader (EL.).  
 Sand, H. J. S., Ph.D. Zür., D.Sc.  
     Birm. (10).  
 Senter, G., Ph.D. Leip., D.Sc. (Bk.).  
 Smiles, S., O.B.E., D.Sc., F.R.  
     Daniell Prof. (I).  
 Smith, F. W., B.Sc.  
 Stratton, Mrs. K., M.Sc. (E).  
 Streatfeild, F. H. ( ).  
 Sugden, S., B.Sc., A.R.C.S., A.I.  
     (B).  
 Thole, F. B., D.Sc. (B).  
 Tinkler, C. K., B.Sc. Lond. &  
     Wales, D.Sc. Birm.  
     Prof. (KI).  
 Tuck, W. B., D.Sc. Prof. (I).  
 White, J. L., D.Sc. Durh.  
 Whiteley, Martha A., O.B.  
     D.Sc., A.R.C.S. (Ir).  
 Widdows, Sybil T., B.Sc., F.I.  
     (LV).  
*Chemistry, Organic*  
 Collie, J. N., LL.D. Glas., D.  
     Liv. and Belf., Ph.D. Wü.  
     F.I.C., F.R.S. Prof. (I).  
 Crocker, J. C., M.A. Camb., D.  
     F.C.S. (1).  
 Fairbourn, A., M.Sc. Manc., B.  
     Ox. (I).  
 Richardson, D. H., M.Sc.  
 Thorpe, J. F., C.B.E., D.Sc. Mar  
     Ph.D. Heid., F.I.C., F.C.  
     F.R.S. (In).  
*Chemistry, Pathological, v. a*  
*Bio-Chem.*  
 Goodbody, F. W., M.D., B.C.  
     B.A.O., B.A. Dub. (U).  
 Wallis, R. L. M., M.A., M.  
     Camb. (I).  
 Willcox, Sir Wm. H., K.C.I.  
     C.B., C.M.G., M.D., B.S.  
     F.R.C.P., F.I.C., F.C.  
     D.P.H. (also in Med. and F  
     Med.) (SM).  
*Chem., Physical*  
 Salmon, C. S., M.Sc. Bristol (F).  
 Spencer, J. F., D.Sc. Liv., Ph  
     Bres., B.Sc. Manc.  
     Reader (BV).  
*Chemistry, Physiological*  
 Gardner, J. A., M.A. Ox., F.I.  
     F.C.S. Reader (22, SC  
     (also recogd. LV).

- Schryver, S. B., Ph.D. Leip., D.Sc. (Im.).
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- Chinese, v. Oriental Langs.*
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- Armstrong, G. C., B.A. Camb. (Wf.).
- Butler, H. E., M.A. Ox. Prof. of Lat. (U.).
- Crump, Mary, M.A. (Latin) (I).
- Earp, F. R., M.A. Camb. (EL.).
- Kilner, G. W., M.A. (N., H., R.).
- Knight, Clara M., D.Lit. Reader (K.).
- Leon, P., B.A. Ox. (Latin) (U.).
- MacGregor, J. M., M.A. Ox. Reader in Gk. (BW.).
- Marshall, F. H., M.A. Camb. (recogd. also in *Archæol.*) (Bk.).
- Parker, Constance E., M.A. (Wf.).
- Platt, J. A., M.A. Camb. Prof. of Gk. (U.).
- Richardson, Anne W., B.A. (Wf.).
- Sleeman, J. H., M.A. Camb. Prof. (Ho.).
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- Tarrant, Dorothy, M.A. (BW.).
- Taylor, Margaret E. J., M.A. Dub. (Ho.).
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- Sargent, A. J., M.A. Ox. Prof. (E.).
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- Danish* [(U.).
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- Hopson, M. F., L.D.S. (D. Anat.)
- Pare, J. W., M.D., C.M. Edin., L.D.S. (UM.).
- Underwood, A. B. G., M.B., B.S., L.D.S. (UM.).
- Dental Mechanics*
- Chapman, H., L.D.S. (*Orthodontics*) (L.).
- Dowsett, E. B., L.R.C.P., M.R.C.S., L.D.S. (G.).
- Gabell, D. P., L.R.C.P., M.R.C.S., L.D.S. (D.).
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- Parfitt, J. B., L.R.C.P., M.R.C.S., L.D.S. (G.).
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- Turner, H. W., M.R.C.S., L.D.S. (M.).

- Turner, J. G., F.R.C.S., L.D.S. (D.).  
 Wallis, C. E., L.R.C.P., M.R.C.S.,  
 L.D.S. (KM.).  
*Dutch* [Prof. (U., BW.).  
 Geyl, P., Lit.D. Leyd.  
 Harting, P. Reader (U., BW.).  
*Economics*, v. also Com., Geog.,  
 Pol., Pub. Admn., Soc., Stat.  
 Beveridge, Sir W. H., K.C.B.,  
 M.A., B.C.L. Ox. (Descr. E.  
 and Pub. Admn.). (E.).  
 Cannan, E., M.A. Ox., LL.D. Glas.  
 Prof. of Pol. Econ. (E.).  
 Foxwell, H. S., M.A. Camb., B.A.,  
 F.B.A.  
 Prof. of Pol. Econ. (U.).  
 Lloyd, C. M., M.A. Ox. (E. and  
 Pub. Admn.). (E.).  
 Ramsbottom, J. W., M.A. Manc.,  
 M.Com. Durh. (E.).  
 Stocks, Mrs. M. D., B.Sc. (KH.).  
 Urwick, E. J., M.A. Ox.  
 Prof. of Social Philos. (E.).  
*Economic Geography*, v. also  
 Comm. [(E.).  
 Ormsby, Mrs. H. R., B.Sc. (Econ.)  
*Economic Hist.*, v. also Palæog.,  
 Pub. Admn. [Prof. (E.).  
 Knowles, Mrs., Litt.D. Dub.  
 Tawney, R. H., B.A. Ox.  
 Reader (E.).  
*Education*, v. also Music  
 Adamson, J. W., B.A. Prof. (K.).  
 Brock, F. H. C., M.A. (I.).  
 Fairgrieve, J., M.A. Ox., B.A.  
 (Tr.).  
 Firth, Catherine B., D.Lit. (15).  
 Graveson, Caroline C., B.A. (1).  
 Hague, J. C., M.A. Manc. (Tr.).  
 Hubback, Jane C., T.C. Camb.  
 (15).  
 Hudson, R., M.A. Camb. (17).  
 Johnston, Katharine L., M.A.  
 Sheff., T.D. Camb., B.A. (14).  
 Meiklejohn, Grace I. W., M.A.  
 Edin. (14).  
 Nunn, T. P., M.A., D.Sc.  
 Prof. (Tr.).  
 Powell, Helena L. (15)  
 Punnett, Margaret, B.A. (Tr.)  
 Raymont, T., M.A. (1)  
 Showan, P. B., M.A. Liv. (K.)  
 Smith, Phyllis W., M.A. (14)  
 Steppat, Mrs. M. A. A., M.A.  
 Durh., M.A. (14)  
 Von Wyss, Clotilde R. R., T.C.  
 Camb. (Tr.)  
 Wimms, J. H., M.A. Wales, B.S.  
 (1)  
*Egyptology*, v. Archæol.  
*Embryology*, v. Anat.  
*Engineering*, v. *infra*  
*English*, v. also Lib'ship  
 Blackman, Mrs. E., M.A. (U.)  
 Block, Katharine S., M.A. Dub.  
 (Ho.)  
 Chambers, R. W., M.A., D.Lit.  
 Quain Prof. of E. Lang.  
 and Lit. (U.)  
 Daunt, Beatrice M. (Bk.)  
 Davis, B. E. C., M.A. (EL.)  
 Foster, Sir T. G., Ph.D. Stras.  
 B.A. (Lang. and Lit. and  
 Philol.) (U.)  
 Gollancz, Sir I., Litt.D. Camb.  
 F.B.A.  
 Prof. of E. Lang. and Lit.  
 (K.)  
 Grattan, J. H. G., B.A. (U.)  
 Ingram, Emily G., M.A. (K.)  
 Lee, Margaret L., M.A. Ox. (K.)  
 Lee, Sir Sidney, D.Litt. Ox.  
 Litt.D. Manc., LL.D. Glas.  
 F.B.A.  
 Prof. of E. Lang. and Lit.  
 (EL.)  
 Lobban, J. H., M.A. Aberd. (Lang.  
 and Lit.) (Bk.)  
 Nicoll, J. R. A., M.A. Glas. (K.)  
 Pollard, A. W., C.B., M.A. Ox.  
 D.Litt. Durh.  
 Prof. of E. Bibliog. (K.)  
 Reed, A. W., M.A. Reader (K.)  
 Routh, H. V., M.A. Camb.  
 Reader in E.Lit. (BW.).

- Spurgeon, Caroline F. E., D. de  
l'U. Paris, Litt.D. Mich.  
Prof. of E. Lit. (BW.).  
Thomas, P. G., M.A. Camb. & Liv.  
Reader in E. Lang. and  
Lit. (BW.).  
Warren, Kate M.  
Reader in Lang. and  
Lit. (Wf.).  
Willcock, Gladys D., M.A. (Ho.).  
Williams, O. T., M.A. Wales (EL.).

*Entomology*, v. Zool.

*Ethnology*

- Seligman, C. G., M.D., F.R.C.P.,  
F.R.S. Prof. (E.).

*Eugenics*

- Elderton, Ethel M. (Applied  
Statistics) (U.).  
Pearson, Karl, M.A. Camb., LL.D.  
Aberd. and St. And., F.R.S.  
Galton Prof. (U.).

*French*

- Brandin, L. M., M.A., Ph.D.  
Greifswald, L. ès L.  
Fielden Prof. of F. and  
Romance Philol. (U.).  
Crosland, Mrs. J., M.A. (Wf.).  
Dechamps, J. A., D.Phil., D. ès L.  
Liège (EL.).  
Eccles, F. Y., M.A. Ox.  
Prof. of F. Lit. (BW.).  
Halket, Eliz. C., M.A. (EL.).  
Honey, Margaret E. D., M.A. (F.  
and Romance Philol.) (Ho.).  
Johnson, Fanny C., M.A. (BW.).  
Kastner, V. E., B. ès L., Paris  
(Bk.).  
Perret, J. A., O.A. (4).  
Perry, Mrs. M. C. A. E. (EL.).  
Spiers, V., M.A. Ox., B. ès L., Paris  
(K.).  
Stone, Louise W., M.A. (Bk.).  
Tuke, Margaret J., M.A. Dub. (F.  
and Romance Philol.) (BW.).  
Turquet, Mrs. Gladys R., M.A.,  
D.Lit. Reader (Wf.).  
Webb, C. D., M.A., D.Lit., B.Sc.  
(K.).

*Geography*, v. also Econ.

- Hosgood, Blanche, B.A. (BW.).  
Lyde, L. W., M.A. Ox. Prof. (U.).  
Mackinder, Sir H. J., M.A. Ox.,  
M.P. Reader (E.).  
Smith, H. G., B.Sc., A.R.C.S. (EL.).  
Taylor, Eva G. R., B.Sc. (EL., Bk.).  
Unstead, J. F., M.A. Camb.,  
D.Sc. Prof. (Bk.).

*Geology*

[(Ag.).

- Brade-Birks, S. G., M.Sc. Manc.  
Brammall, A., M.Sc. (8).  
Cullis, C. G., D.Sc., M.I.M.M.,  
F.G.S. (Mineral) (Im.).  
Davies, A. M., D.Sc., A.R.C.S.,  
F.G.S. (Im.).  
Davies, G. MacD., M.Sc. (Bk.).  
Elsden, J. V., D.Sc. (U.).  
Evans, J. W., D.Sc., LL.B., F.R.S.,  
F.G.S. (Im.).  
Garwood, E. J., M.A., Sc.D. Camb.,  
F.R.S., F.G.S.  
Yates-Goldsmid Prof. (U.).  
Gordon, W. T., B.A. Camb., D.Sc.,  
M.A. Edin. Prof. (K.).  
Hawkes, L., M.Sc. Durh.  
Reader (BW.).  
Maslen, A. J., F.G.S. (11).  
Smith, H. G., B.Sc., A.R.C.S. (EL.).  
Watts, W. W., M.A., Sc.D. Camb.,  
M.Sc. Birm., LL.D. St. And.,  
F.R.S., F.G.S. (Im.).  
Wells, A. K., B.Sc. (K.).

*German*

- Atkins, H. G., B.A. Camb., M.A.,  
D.Lit. Reader (K.).  
Bithell, J., M.A. Manc.  
Reader (Bk.).  
Delp, Wilhelmine E., D. de l'U.  
Paris (Ho.).  
Dunstan, A. C., B.A. Lond., Ph.D.  
Königsberg (EL.).  
Massey, Isabella M., Ph.D. Mar-  
burg Reader (BW.).  
Perrett, W., Ph.D. Jena, B.A.  
Reader (U.).  
Pribsch, R. C., Ph.D. Graz.  
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Richey, Marg. F., M.A. (Ho.).

# LONDON

- Robertson, J. G., M.A., B.Sc.  
Glas., Ph.D. Leip.  
Prof. (U., BW.).
- Steppat, J., Ph.D. Wien, B.A.  
Reader (K.).
- Williams, O. T., M.A. Wales (Germanic Philology) (EL.).
- Greek, Modern*
- Oeconomos, L., L. ès L., D. de l'U.  
Paris (K.).
- Toynbee, A. J., B.A. Ox.  
Koraés Prof. (K.).
- Hebrew, v. Semitic*
- Historical Research and Archive Science*
- Jenkinson, H., M.A. Camb. (K.).
- History and Culture of British Dominions in Asia, with special ref. to India* [(O.).
- Dodwell, H. H., M.A. Ox. Prof.
- History and Records of London*
- Davis, Eliza J., M.A. Reader (U.).
- History, v. also Econ., Palæog.*
- Adair, E. R., M.A. Camb. (U.).
- Allen, J. W., M.A. Ox. (BW.).
- Barker, E., D.Litt. Ox., LL.D.  
Edin. (K.).
- Chew, Helena M., M.A. (K.).
- Clarke, F., M.A. Ox. (EL.).
- Dymond, Dorothy, M.A. (I.).
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- Jenkins, C., M.A. Ox., F.S.A. (Eccl. H.) (K.).
- Johnstone, Hilda, M.A. Manc.  
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- Lodge, Eleanor C., M.A. Ox. (Wf.).
- Martin, Eveline C., M.A. (EL.).
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- Newton, A. P., B.Sc., D.Lit.  
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- Power, Eileen le P., M.A. (K., E.).
- Seton-Watson, R. W., D.Litt. Ox.,  
Ph.D. Prague and Zag. (Cent. European H.) Prof. (K.).
- Skeel, Caroline A. J., D.Lit.  
Reader (I).
- Thornley, Isobel D., M.A.  
*History, Ancient* [Reader
- Baynes, N. H., M.A. Ox.
- Cary, M., D.Litt. Ox.  
Reader (U., B
- Laistner, M. L. W., M.A. Car  
Reader
- History, English*
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Manc., F.B.A. Prof.
- History and Instns., M<sup>c</sup>*  
*French* [Prof.
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(M. and Const. H.)
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- Cippico, A., Dr. Juris Graz.
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- Languages, v. under Afri*  
*Arabic, etc.*
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(recogd. in Engl. Lit.)
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- Logic, v. Philos.*
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- Bickley, W. G., M.Sc.
- Bryant, R., B.A., D.Sc.
- Churchill, W. F. S., M.A. Ox.  
(E

- Clay, R. S., B.A. Camb., D.Sc. (8).  
 Coates, C. V., M.A. R.U.I. (Bk.).  
 Curzon, H. E. J., M.A. Camb., D.Sc. (1).  
 Dale, J. B., M.A. Camb., B.A. (K.).  
 Davidge, H. T., B.Sc., A.R.C.Sc. (U.).  
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 Graham, J., B.E., B.A. R.U.I. (5).  
 Green, S. L., M.Sc. (EL.).  
 Harris, H. H., M.A. Camb. (2).  
 Harvey, F. W., M.A. R.U.I., B.Sc. (2).  
 Hatton, J. L. S., M.A. Ox. (EL.).  
 Higgins, Ellen C., B.A. (Ho.).  
 Hill, M. J. M., M.A., Sc.D. Camb., LL.D. St. And., F.R.S. Astor Prof. (U.).  
 Hilton, H., M.A., D.Sc. Ox. Prof. (BW.).  
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 Jolliffe, A. E., M.A. Ox. Prof. (Ho.).  
 Klugh, H., D.S.C., B.A. Camb. (Im.).  
 Le Beau, G. S., M.A. Ox. (EL.).  
 Levy, H., D.Sc. Ox., M.A., B.Sc. Edin. (Im.).  
 Lister, J., A.R.C.S. (11).  
 Littlejohn, E. S., M.Sc. Manc. (12).  
 Miller, T. H., M.A., D.Sc. Glas. (16).  
 Pick, Marion, M.A. (Ho.).  
 Rhind, A., B.Sc., A.R.C.S. (8).  
 Rowell, Ethel M. (Ho.).  
 Salmon, W. H., M.A. Camb., B.Sc. (12).  
 Saxelby, F. M., M.Sc. Manc., B.A. (2).  
 Sherriff, Catherine W. K., M.A., B.Sc. St. And. (K.).  
 Shovelton, S. T., M.A. Ox. (K.).  
 Smart, E. H., M.A. Camb. (Bk.).  
 Smith, R. T., B.A. Camb. (13).  
 Soal, S. G., M.A., B.Sc. (EL.).  
 Tinto, J. F., M.A., D.Sc. Glas., B.A. Camb. (K.).  
 Turner, G. C., B.Sc. (7).  
 Whitby, Lilian J., B.A. (Wf.).  
 White, S. A. F., M.A. Ox. Prof. (K.).  
 Whitehead, A. N., M.A., Sc.D. Camb., LL.D. St. And., F.R.S. (Im.).  
 Wren, T. L., M.A. Camb. Reader in Geom. (U.).  
 Wrinch, Dorothy M., D.Sc. (U.).  
*Maths., Applied, and Mechanics*  
 Filon, L. N. G., B.A. Camb., M.A., D.Sc., F.R.S. Goldsmid Prof. (U.).  
*Medicine and Surgery, v. infra*  
*Metallurgy*  
 Carpenter, H. C. H., M.A. Ox., Ph.D. Leip., A.R.S.M., M.I.M.M., F.R.S. (Im.).  
 Courtman, E. O., A.R.S.M. (Im.).  
 Drinkwater, B. W., B.Sc., A.R.S.M., A.R.C.S., A.I.M.M., F.I.C. (Im.).  
 Merrett, W. H., A.R.S.M., M.I.M.M., F.I.C. (Im.).  
 Naish, W. A., A.R.S.M., M.I.M.M., A.I.C. (11).  
*Mineralogy, v. Geol.*  
*Mining*  
 Cooke, L. H., A.R.S.M., M.I.M.M., F.G.S. (Im.).  
 Truscott, S. J., A.R.S.M., M.I.M.M., F.G.S. (Im.).  
 Yates, A., M.I.M.M. (Im.).  
*Music*  
 Allen, Sir H. P., Mus.D., M.A. Ox., F.R.C.M. (20).  
 Bridge, Sir Frederick, C.V.O., Mus.D. Ox., M.A. Durh. K. Edward Prof. (20).  
 Corder, F., F.R.A.M. (19).  
 Davies, H. Walford, Mus.D. Camb., LL.D. Leeds, F.R.C.O., A.R.C.M. (20).  
 Daymond, Emily R., A.R.C.M. (20).  
 Dunhill, T. F., A.R.C.M. (20).



# LONDON

- Greenish, A. J., Mus. D. Camb. (19). Flügel, J. C., B.A. Ox. (Psychol.) (U)
- Horner, E. F., D.Mus. Durh., F.R.C.O. (21). Ginsberg, M., M.A. (U)
- Macpherson, S., F.R.A.M. (19). Green, S. W., M.A. (also in Theor.) (F)
- Parratt, Sir Walter, K.C.V.O., Mus.D., M.A. Ox., Mus.D. Camb. (20). Hadfield, J. A., M.A. Ox., M. Ch.B. Ed. (Psychol.) (F)
- Pearce, C. W., Mus.D. Camb., M.A. Durh. (21). Hazlitt, Victoria H., M. (Psychol.) (BW)
- Read, F. J., Mus.D. Ox. (20). Hicks, G. D., M.A., Litt.D. Mar. Ph.D. Leip. (U)
- Richards, H. W., Mus.D. Durh., F.R.C.O. (19). Oakeley, Hilda D., M.A. McG. Reader (F)
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- Wetton, H. D., D.Mus. Durh., F.R.C.O. (2). Jones, D., M.A. Camb. Prof. (U)
- Wharton-Wells, H., B.Mus. Ox. and Durh., F.R.C.O., L.R.A.M. (also in Pedag. as applied to Music) (11). Jones, Stephen, B.Sc. Wales (U)
- Wood, C., M.A., Mus.D. Camb., LL.D. Leeds (20). *Physics* [Quain Prof. (U)
- Mycology*, v. Bot. Bragg, Sir W. H., K.B.E., M. Camb., D.Sc. Manc., Lee and Dub., F.R.S.
- Norwegian* [(U.)]. Brinkworth, J. H., M.Sc. (I)
- Gröndahl, I. C., Cand. Mag. Christ. Callendar, H. L., C.B.E., M. Camb., LL.D. McG., F.R.S. (Im)
- Optics*, v. Physics Charlesworth, J., M.Sc. Manc. (Cheshire, F. J., C.B.E., A.R.C.S. (Optics) (Im)
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- Philosophy*, v. also Theol. Davies, Ann C., D.Sc. (Hc)
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- Forsyth, R. W., A.R.C.S. (Im)

- Griffiths, A., D.Sc. Manc., A.R.C.S.,  
F.P.S., A.I.E.E. Prof. (Bk.).
- Harlow, F. J., B.Sc., A.R.C.S.  
(10).
- Horton, F., Sc.D. Camb., M.Sc.  
Birm., D.Sc. Prof. (Ho.).
- Lees, C. H., D.Sc. Manc., F.R.S.  
Prof. (EL.).
- Lownds, L., Ph.D. Berl., B.Sc. (11).
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Gött. (2).
- Moss, H., M.Sc., A.R.C.S., D.I.C.  
(Im.).
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- Nicol, J., B.A. Camb., B.Sc. (8).
- Orson-Wood, D., M.Sc., A.R.C.S.  
(U.).
- Oschwald, U. A., B.A. (11).
- Owen, D., B.A. Camb., D.Sc. (10).
- Philpot, A. J., B.Sc. (K.).
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(12).
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F.R.S.  
Reader in Thermo-  
dynamics (U.).
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D.Sc., F.R.S.  
Wheatstone Prof. (K.).
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- Saltmarsh, Maud O., B.A. Dub.  
(B.).
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- Starling, S. G., B.Sc., A.R.C.S.,  
A.I.E.E. (12).
- Stoney, Edith A., M.A. Dub.  
(KH.).
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B.A. Cape (U.).
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(11).
- Vinycumb, T. B., M.A. R.U.I. (13).
- White, W. H., M.A. Camb., B.Sc.,  
A.R.C.S. (SM.).
- Wilson, W., Ph.D. Leip., D.Sc.  
Prof. (BW.).
- Womack, F., M.B., B.Sc. (B.).
- Physics, Astronomical*
- Fowler, A., A.R.C.S., F.R.S. (Im.).
- Gregory, C. C. L., M.A. Camb.  
(Astronomy) (U.).
- Physiology, v. also Bio-Chem.  
and Chem.*
- Anrep, G., M.D. Petrograd (U.).
- Bayliss, Sir W. M., M.A., D.Sc.  
Ox., Sc.D. Dub., LL.D. Aberd.  
and St. And., F.R.S. (General  
P.) Prof. (U.).
- Collingwood, B. J., B.A., M.D.,  
B.Ch. Camb. Prof. (SM.).
- Cullis, Winifred C., O.B.E., D.Sc.  
Prof. (LW.).
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F.R.C.P. (K.).
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Camb. Reader (BW.).
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Prof. (B.).
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F.R.C.P., F.R.S. Prof. (K.).
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Ch.B. Manc., M.B., B.S. (U.).
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And. (K.).
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- Mottram, V. H., M.A. Camb.  
Prof. (KH.).
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Ox., F.R.S. Prof. (G.).
- Roaf, H. E., M.D. Tor., D.Sc. Liv.  
Prof. (L.).
- Starling, E. H., C.M.G., Sc.D.  
Camb., M.D., B.S., F.R.C.P.,  
F.R.S. Jodrell Prof. (U.).
- Symes, W. L., M.R.C.S., Ag. Dir.  
of Lab. (9, 22).
- Vincent, T. S., D.Sc. Edin., M.D.  
Prof. (M.).
- Political Science, v. also Econ.*
- Barker, E., D.Litt. Ox., LL.D.  
Edin. (K.).
- Laski, H. J., M.A. Ox. (E.).
- Wallas, Graham, M.A. Ox., Litt.D.  
Manc. Prof. (E.).

# LONDON

- Political Theory*  
Dickinson, G. L., M.A. Camb. (E.).
- Protozoology*, v. Zool.
- Public Administration*, v. also Econ.  
Hurst, G. H. J. (v. Law) (Bk.).  
Lees-Smith, H. B., M.A. Ox.  
(Public Administration and Economics) (E.).  
Webb, S. J., LL.B. Prof. (E.).
- Public Health*, v. Med.
- Romance Philology*  
Shears, F. S., L ès L. Grenoble, B.A. Reader (K.).
- Russian*, v. also Slav.  
Meyendorff, Baron A. F. (R. Institns., etc.). Reader (K.).  
Pares, Sir Bernard, K.B.E., M.A. Camb. Prof. (K.).  
Raffi, Arshak (K.).
- Scandinavian*, v. Dan., Nor., Swe.
- Semitic Languages*  
Box, G. H., M.A. Ox., D.D. St. And. (Hebrew) (K.).  
Büchler, A., Ph.D. Leip. (6).  
Daiches, S., Ph.D. Leip. (6).  
Gollancz, H., M.A., D.Lit. (Heb., Aramaic, Syriac) (U.).  
Greenup, A. W., M.A. Dub. and Camb., D.D. Ont., Litt.D. Dub. (Hebrew & Aramaic) (J.).  
Hirschfeld, H., Ph.D. Stras. (S. Epig. & Hebrew & S.) (U., 6).  
Marmorstein, A., Ph.D. Heid. (Bible and Rabbinics) (6).
- Slavonic Languages*, v. also Russian  
Jopson, N. B., B.A. Camb. (Comp. S. Philol.) Reader (K.).  
Subotič, D., Ph.D., Munich (Serbo-Croat Lang. and Yugoslav Lit. and Hist.) (K.).
- Sociology*, v. also Econ.  
Hobhouse, L. T., D.Litt. Du M.A. Ox., LL.D. St. And.  
Martin White Prof. (  
Westermarck, E. A., Ph.D. H. LL.D. Aberd.  
Martin White Prof. (  
*Spanish*  
Barragán, J. V. (E  
Pastor, A. R., D.Ph. Mad B.Litt. Ox.  
Cervantes Reader (1  
Villasanté, J. M., LL.D. Madri (1  
*Statistics*, v. also Eugenics  
Bowley, A. L., Sc.D. Camb. Prof. (1  
*Surveying*, v. Engin.
- Swedish*  
Björkhagen, O. I., Phil.Mag. U (1  
*Theology*  
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Barber, W. T. A., M.A. Carr D.D. Dub. (WI  
Box, G. H. (v. Semitic) (K1  
Davies, W. A., M.A. Ox. a Wales, B.D. (N., F  
Dearmer, P., D.D. Ox. (K1  
Garvie, A. E., M.A. Glas. and C D.D. Glas. (N., F  
Gore, Rt. Rev. C., D.D., D.C Ox., D.D. Edin. and Dur LL.D. Camb. and Birm. (K1  
Goudge, H. L., M.A., D.D. Ox (K1  
Green, S. W., M.A. (F  
Greenup, A. W. (v. Semi Languages) (J  
Jenkins, C., M.A. Ox., F.S.A. (K1  
Matthews, W. R., M.A., D.D. [a recognized in Philos. (K.)] (K1  
Relton, H. M., D.D. (K1  
Robinson, H. W., M.A. Ox. a Edin. (R

- Rogers, C. F., M.A. Ox. (KT.).  
 Scullard, H. H., M.A. Camb.,  
     M.A., D.D. (N., H.).  
 Smith, C. R., B.A., D.D. (WR.).  
 Smith, H., M.A. Camb., D.D. (J.).  
 Titterton, C. H., M.A., B.D. Edin.  
     (J.).  
 Waterhouse, E. S., M.A., B.D.  
     (WR.).
- Thermodynamics*, v. Physics  
*Transport*, v. Econ.  
*Veterinary Science*  
 Cave, T. W., F.R.C.V.S. (Ag.).  
*Vet. Hygiene*  
 Wooldridge, G. H., F.R.C.V.S.  
     (9).
- Vet. Path. and Bacteriology*  
 McFadyean, Sir John, LL.D.,  
     M.B., C.M., B.Sc. Edin.,  
     M.R.C.V.S. Prof. (9).
- Zoology*  
 Alcock, Col. A. W., C.I.E., C.M.,  
     M.B., LL.D. Aberd., F.R.S.  
     (Medical Z.) Prof. (TM.).  
 Bacot, A. W. (Med. Entom.) (LI.).  
 Buchanan, Florence, D.Sc. (Ho.).  
 Cannon, H. G., M.A. Camb. (Im.).  
 Cunningham, J. T., M.A. Ox.,  
     F.Z.S. (8, EL.).  
 Dendy, A., D.Sc. Manc., F.R.S.  
     Prof. (K.).  
 Evans, T. J., M.A. Ox. (G.).  
 Fraser, Eliz. A., D.Sc. (U.).  
 Jackson, H. G., M.Sc. Liv.  
     Reader (Bk.).  
 Lefroy, H. M., M.A. Camb.,  
     F.L.S. (Entomol.) (Im.).  
 MacBride, E. W., M.A. Camb.,  
     LL.D. McG., D.Sc., F.R.S.  
     (Im.).  
 MacKinnon, Doris L., D.Sc. Aberd.  
     Reader (K.).  
 Mudge, G. P., A.R.C.S., F.Z.S.  
     (EL.).  
 Nutt, Muriel M. (11).  
 Thomson, J. G., M.A., M.B., Ch.B.  
     Edin. (Protozool.) (TM.).
- Tims, H. W. M., O.B.E., M.A.  
     Camb., M.D., Ch.M. Edin.,  
     F.L.S., F.Z.S. Reader (BW.).  
 Tribe, Margaret, M.Sc. (K.).  
 Watson, D. M. S., M.Sc. Manc.,  
     F.R.S.  
     Jodrell Prof. of Z. and  
     Comp. Anat. (U.).  
 Woodcock, H. M., D.Sc. (Proto-  
     zoology) (LI.).
- Engineering*, v. also Metall., Mining  
*Aviation*  
 Glazebrook, Sir R. T., K.C.B.,  
     Sc.D. Camb., D.Sc. Ox.,  
     F.R.S. Zaharoff Prof. (Im.).  
 Piercy, N. A. V., D.Sc. (Eng.) (EL.).
- Civil Engineering*  
 Barker, A. H., B.A., B.Sc. (Heat-  
     ing and Ventg. E.) (U.).  
 Coker, E. G., M.A. Camb., D.Sc.  
     Edin., M.Sc. McG., A.R.C.S.,  
     M.I.C.E., F.R.S. (Civ. and  
     Mech. E.) Prof. (U.).  
 Curnock, W. E. M., M.Sc. (Eng.)  
     Manc., B.Eng. Liv., A.M.I.E.E.  
     (Civ. and Mech. E.) (2).  
 Dalby, W. E., M.A. Camb., B.Sc.,  
     M.I.C.E., M.I.M.E., A.M.I.N.A.,  
     F.R.S. (C. & Mech. E.)  
     Prof. (Im.).  
 Davidge, H. T., B.Sc., A.R.C.S.  
     (C. & Mech. E.) (U.).  
 Dixon, S. M., M.Sc., M.A., B.A.I.  
     Dub., M.I.C.E. (Im.).  
 Genève, L. F. C. A., B.Sc. (Eng.),  
     A.C.G.I. (C. & Mech. E.) (K.).  
 Higgins, A. L., M.Sc. Belf.,  
     A.M.I.C.E. (EL.).  
 Jameson, A. H., M.Sc. Manc.,  
     M.I.C.E. Prof. (K.).  
 Lamb, E. H., D.S.C., M.Sc. Manc.,  
     A.M.I.C.E., M.I.M.E. (Civ. &  
     Mech. E.) Prof. (EL.).  
 Lobban, C. H., B.Sc. (Eng.)  
     Glas., A.M.I.C.E. (K.).  
 Newton, K., B.Sc. (Eng.),  
     A.M.I.C.E. (Civ. and Mech.  
     E.) (Im.).

- Ormsby, M. T. M., A.R.C.S. Dub., M.I.C.E.I.  
 Chadwick Prof. of Munic. E.(U.).  
 Purser, J., B.A., B.A.I. Dub., M.Sc. Birm., A.M.I.C.E. (Im.).  
 Rice-Oxley, M. K., A.C.G.I., A.M.I.C.E. (Im.).  
 Smith, S. L., M.Sc. (Eng.) (Civ. and Mech. E.) (Im.).  
 Wedgwood, G. A., M.Sc. (Eng.) Belf., B.Sc. (Eng.) (Civ. and Mech. E.) (EL.).  
 Whittaker, H., B.Sc. (Eng.), A.R.C.S., A.M.I.M.E. (Civ. and Mech. E.) (Im.).  
 Witchell, E. F. D., B.Sc., A.C.G.I. (Civ. and Mech. E.) (Im.).  
 Wolley-Dod, J. C., B.Sc. (Eng.) (K.).
- Electrical Engineering*  
 Baillie, T. C., D.Sc., M.A. Edin. A.M.I.E.E. (12).  
 Burgess, A. F., B.Sc. (Eng.) (7).  
 Catterson-Smith, J. K., M.I.E.E. (5).  
 Clinton, W. C., B.Sc., M.I.E.E. (U.).  
 Denton, F. M., A.C.G.I. (7).  
 Dover, A. T., A.M.I.E.E. (2).  
 Dowse, C. M., B.Sc. (Eng.) (7).  
 Eccles, W. H., D.Sc., F.R.S. (5).  
 Fleming, J. A., M.A. Camb., D.Sc., F.R.S. Prof. (U.).  
 Fortescue, C. L., M.A. Camb. (Im.).  
 Hague, B., M.Sc., A.C.G.I. (Im.).  
 John, W. J., A.R.C.Sc., A.M.I.E.E. (EL.).  
 Jolley, A. C. (7).  
 Macgregor-Morris, J. T., M.I.E.E., A.I.C.E. (EL.).  
 Mallett, E., M.Sc. (Eng.) (Im.).  
 Robertson, F. S., M.I.E.E. (K.).  
 Rushton, A., M.Sc. (Tech.) Manc. (Im.).  
 Shawcross, R. E., A.M.I.C.E. (K.).  
 Sims, J. W., A.M.I.E.E., A.M.I.M.E. (Im.).  
 Smith, S. P., D.Sc. Durh., A.M.I.C.E., M.I.E.E. (Im.).  
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- Walmsley, R. M., D.Sc., M.I.E. ( )  
 Wilson, E., M.I.C.E., M.I.E.E. W. Siemens Prof. (K)
- Engineering Design*  
 Cruickshank, A., M.I.M.E. (Ir)  
 Sillick, W. E. G., A.R.C.S., D.I. (Drawing and Design) (Ir)  
 Webb, A. E., B.Sc. (Eng) A.M.I.C.E. (U)
- Mech. Engin.*, v. also Civ. E.  
 Ashworth, M. H., B.Sc. Manc. ( )  
 Campbell, H. G., B.Sc. (En Durh. (K)  
 Chappell, E., B.Sc., A.M.I.C. A.C.G.I. (In  
 Cook, G., D.Sc. Manc., A.M.I.C. A.M.I.M.E. Prof. (K)  
 Davies, V. C., B.Sc., A.M.I.M. ( )  
 Edmonds, H. M., B.Sc. (Eng.) ( )  
 Hewson, W., B.Sc., A.R.C. A.M.I.C.E. (In  
 Howard, J. V., M.Sc. (Eng.) (In  
 Keith, D. A., A.M.I.C.E. (Struc E.) ( )  
 Larard, C. E., M.I.M.E., M.I.C. ( )  
 Lewitt, E. H., B.Sc. (Eng.) (In  
 Lloyd-Evans, B. J., B.Sc. (Eng) A.M.I.M.E. (U)  
 Richardson, D. ( )  
 Scoble, W. A., M.B.E., D.S (Eng.), M.I.M.E., A.M.I.C. ( )  
 Shaw, J. B., A.R.C.S. ( )  
 Sprague, E. H., A.M.I.C.E. (U)  
 Wells, G. J., A.M.I.C.E., M.I.E. M.I.Mar.E. (EL)
- Mech. Engin. and Surveying*  
 Duncan, J., M.I.M.E. ( )  
 Gladwyn, A. E., B.Sc. (Eng) A.M.I.M.E. ( )  
 Parker, W. E., B.Sc. (Eng.) Mar ( )
- Mining and Power*  
 Holman, B. W. (Ir)

## Law

*Commercial* [(4).  
Humphries, S., B.A., LL.B. Camb.  
Page, A., K.C., B.A. Ox. (also Crim.  
L. and Proc., K.) (E.).

*Comm. & Industr.* [Cassel Prof.  
Gutteridge, H. C., M.A. Camb.

*Common*  
Griffith, W. H., M.A. Camb. (K.).

*Comparative* [Quain Prof. (U.).  
de Montmorency, J. E. G., M.A.,  
LL.B. (Camb.)

*Constitutional* [Prof. (U., E.).  
Morgan, J. H., B.A. Ox., M.A.  
Bellot, H. H. L., M.A., D.C.L. Ox.  
(U., E.).

*English*  
Hurst, G. H. J., M.A., LL.M.  
Camb. Reader (U.).  
Mackay, H. J. H., M.A., LL.B.  
Glas. (K.).

*Hindu and Mohammedan*  
Sabonadière, A. (O.).

*Industrial*  
Slessor, H. H. (E.).

*International*  
Higgins, A. P., O.B.E., M.A.,  
LL.D. Camb. Prof. (E.).

*Legal and Constit. History*  
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*Jurispr. and Roman*  
Hibbert, W. N., LL.D. (K.).  
Murison, A. F., M.A., LL.D.  
Aberd. (U.).

*Railway Law* [(E.).  
Ball, W. V., O.B.E., M.A. Camb.

**Medicine** (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Anæsthetics*  
Braine, C. C., F.R.C.S. (C.).  
Chaldecott, J. H., L.R.C.P. (SM.).  
Charles, H., M.R.C.S., L.R.C.P.  
(M.).

Cross, W. F., M.R.C.S., L.R.C.P.  
(B.).

Gandy, E. W., O.B.E., B.A. Camb.,  
M.R.C.S., L.R.C.P. (W.).

Gilliatt, Mrs., M.B., B.S. (LW.).

Hughes, C. H. M., M.B., B.S.  
(KM.).

Mennell, Z., M.B. (T.).

Probyn-Williams, R. J., M.D.  
Durh. (L.).

Shipway, F. E., M.A., M.D., B.Ch.  
Camb. (G.).

Shirley, H. J., C.M.G., M.D.,  
F.R.C.S. (UM.).

*Bacteriology*, v. also Anat., Path.  
Bulloch, W., M.D., C.M., LL.D.  
Aberd., F.R.S. (recogd. in  
Path.) Goldsmiths' Prof. (L.).

Eyre, J. W. H., M.D., M.S. Durh.,  
D.P.H. Camb. Prof. (G.).

Fleming, A., M.B., B.S., F.R.C.S.  
(SM.).

Freeman, J., M.A., D.M., B.Ch.  
Ox. (SM.).

Goadby, Sir K. W., K.B.E.,  
L.R.C.P., M.R.C.S., L.D.S.,  
D.P.H. Camb. (UM.).

Gordon, M. H., C.M.G., C.B.E.,  
B.Sc., D.M. Ox. (B.).

Hewlett, R. T., M.D., F.R.C.P.,  
D.P.H. (recogd. in Path.)

Prof. (K.).

Hunt, E. L., D.P.H. Camb., M.B.,  
B.S. (also in Path.) (SG.).

Ledingham, J. C. G., C.M.G.,  
M.A., M.B., Ch.B., D.Sc.  
Aberd., F.R.S. Prof. (LI.).

Nabarro, D. N., B.Sc., M.D.,  
D.P.H., F.R.C.P. (25).

Petrie, G. F., M.D., Ch.B. Aberd.  
(LI.).

Taylor, F. E., M.A., M.Sc. Manc.,  
M.B., Ch.B., D.P.H. Camb.

M.D., B.S., F.R.C.S. (K.).

*Dental Science*, v. *supra*

*Dermatology* [(B.).

Adamson, H. G., M.D., F.R.C.P.

Barber, H. W., B.Ch., M.B., M.A.  
Camb., F.R.C.P. (G.).

- Davis, H. D., B.A., B.M., B.Ch. Ox., F.R.C.S. (LW.).  
 Dore, S. E., M.A., M.D., B.Ch. Camb., F.R.C.P. (W.).  
 Fox, W. S., M.D., B.Ch., M.A. Camb., F.Z.S. (SG.).  
 Gray, A. M. H., C.B.E., M.D., B.S., F.R.C.S., F.R.C.P. (UM.).  
 Little, E. G. G., B.A. Cape, M.D., F.R.C.P. (SM.).  
 MacCormac, H. (v. Med., p. 108) (M.).  
 Macleod, J. MacL. H., M.D., C.M., Aberd., M.A. St. And., F.R.C.P. (C.).  
 Sequeira, J. H., M.D., F.R.C.P., F.R.C.S. (L.).  
 Stainer, E., M.A., M.D., B.Ch. Ox., F.R.C.P. (T.).  
 Whitfield, A., M.D., F.R.C.P. (KM.).
- Diseases of Children*  
 Barrington-Ward, L. E., M.Ch. Edin., F.R.C.S. (25).  
 Colman, W. S., M.D., F.R.C.P. (25).  
 Frew, R. S., M.D. Edin., M.R.C.P. (25).  
 Hutchison, R., M.D., C.M. Edin., F.R.C.P. (25).  
 Lane, Sir W. A., Bart., C.B., M.S., M.B., F.R.C.S. (25).
- Diseases of Children & Medicine*  
 Cameron, H. C., M.A. Camb. and Glas., M.D. Camb., F.R.C.P. (G.).  
 Fletcher, H. M., M.A., M.D., B.Ch. Camb., F.R.C.P. (B.).  
 Poynton, F. J., M.D., F.R.C.P. (25, UM.).  
 Still, G. F., M.D., B.Ch., M.A. Camb., F.R.C.P. (25, KM.).  
 Thompson, H. T., M.D., B.Ch., M.A. Camb., B.Sc., F.R.C.P., F.R.C.S. (25, L.).  
 Thursfield, J. H., D.M., M.A. Ox., F.R.C.P. (25, B.).
- Voelcker, A. F., M.D., B.S., F.R.C.P. (25, M.).  
*Dis. of Child., & Surg.*  
 Fairbank, H. A. T., O.B.E., M.S., M.B., F.R.C.S., L.D.S. (25, KM.).  
 Kellock, T. H., M.A., M.D., M.Ch. Camb., F.R.C.S. (25, M.).  
*Dis. of Women*  
 Hedley, J. P., M.A., M.Ch., M.B. Camb., F.R.C.P., F.R.C.S. (T.).  
 Vaughan-Sawyer, Mrs., D.Sc., LL.D. Glas., M.D., B.S. (LW.).  
*Dis. of W., and Midwifery*  
 Barris, J. D., B.A., M.B., B.Ch. Camb., F.R.C.S. (B.).  
 Berkeley, G. H. A. C., M.A., M.D., M.Ch. Camb., F.R.C.P. (M.).  
 Bonney, W. F. V., M.D., M.S., B.Sc., F.R.C.S. (M.).  
 Chapple, H., M.A., M.Ch., M.B. Camb., B.Sc., F.R.C.S. (G.).  
 Donaldson, M., B.A., M.B., B.Ch. Camb., F.R.C.S. (B.).  
 Fairbairn, J. S., M.A., M.B., B.Ch. Ox., F.R.C.P., F.R.C.S. (T.).  
 Holland, E., M.D., F.R.C.S., F.R.C.P. (L.).  
 Luker, S. G., M.A., M.D., B.Ch. Camb. (L.).  
 Playfair, H. J. M., M.D., F.R.C.P., F.R.C.S. (KM.).  
 Robinson, G. H. D., M.D., B.S., F.R.C.P. (W.).  
 Roy, D. W., M.A., M.B., B.Ch. Camb., F.R.C.S. (SG.).  
 Williamson, H., M.A., M.B., B.Ch. Camb., F.R.C.P. (B.).
- Forensic Med., v. also Bio-Chem., Chem.—Path.*  
 Brend, W. A., M.A. Camb., M.D., B.Sc. (C.).  
 Burnford, J. M., M.B., D.P.H. (W.).  
 Burridge, H. A., M.A., M.B. Dub. (KM.).

- Jones, G., M.A., B.M., B.Ch. Ox.,  
D.P.H. (L.).
- Lyster, R. A., M.D., Ch.B., B.Sc.  
(Pub. Health), D.P.H. Birm.,  
B.Sc. (also in Hyg.) (B.).
- Smith, E., M.D. (T.).
- Helminthology*
- Leiper, R. T., D.Sc., M.D., Ch.B.  
Glas. Prof. (TM.).
- Hygiene*
- Brincker, J. A. H., B.A., M.B.,  
B.Ch. Camb., D.P.H., F.I.C.  
(BW., SM.).
- Brown, R. K., M.D., B.Ch., B.A.O.,  
B.A. R.U.I., D.P.H. (G.).
- Carnwath, T., B.A., M.B., B.Ch.,  
B.A.O. (R.U.I.), D.P.H. Camb.  
(T.).
- Copeman, S. M., M.A., M.D.  
Camb., F.R.S., F.R.C.P.,  
D.P.H. (W.).
- Foulerton, A. G. R., O.B.E.,  
D.P.H. Camb., F.R.C.S.  
(LW.).
- Kenwood, H. R., C.M.G., C.M.,  
M.B. Edin., F.C.S., D.P.H.  
Chadwick Prof. (U.).
- Lane-Claypon, Janet E., M.D.,  
D.Sc., B.S. (KH.).
- Lyster, R. A. (v. Forensic) (B.).
- Porter, C., M.D., C.M., B.Sc.  
Edin. (M.).
- Simpson, W. J. R., C.M.G., M.D.,  
C.M. Aberd., F.R.C.P., D.P.H.  
Camb. Prof. (K., KM.).
- Sommerville, D., M.D., B.Ch.,  
B.A.O., B.A. R.U.I., M.Sc.  
Belf., D.P.H. Camb. (K.).
- Spitta, H. R. D., M.V.O., M.D.  
Durh., D.P.H. Camb. (SG.).
- Laryngology, Oto-Rhino-* [(SG.).
- Barwell, H. S., M.B., F.R.C.S.
- Cheatle, A. H., C.B.E., F.R.C.S.  
(KM.).
- Cleminson, F. J., M.A., M.Ch.  
Camb., F.R.C.S. (M.).
- De Santi, P. R. W., F.R.C.S. (W.).
- Dundas - Grant, Sir J., K.B.E.,  
M.D., C.M., M.A. Edin.,  
F.R.C.S. (24).
- French, J. G., M.B., M.S., F.R.C.S.  
(LW.).
- Graham, C. I., F.R.C.S. (SM.).
- Harmer, W. D., M.Ch., M.B., M.A.  
Camb., F.R.C.S. (B.).
- Hastings, S., M.S., M.B., F.R.C.S.  
(M.).
- Hope, C. W. M., M.D., B.S. Durh.,  
F.R.C.S. (KM.).
- Howarth, W. G., M.A., M.B.,  
B.Ch. Camb., F.R.C.S. (T.).
- Lack, H. L., M.D., F.R.C.S. (L.).
- Layton, T. B., M.B., M.S., F.R.C.S.  
(G.).
- Lees, K. A., M.A., M.B., B.Ch.  
Camb., F.R.C.S. (SM.).
- Marriage, H. J., M.B., B.S.,  
F.R.C.S. (T.).
- Mollison, W. M., C.B.E., M.A.,  
M.Ch. Camb., F.R.C.S. (G.).
- Muecke, F. F., C.B.E., M.B., B.Ch.  
Adel, F.R.C.S. (L.).
- Patterson, N., M.B., Ch.B. Edin.,  
F.R.C.S. (L.).
- Rose, F. A., M.A., M.B., B.Ch.  
Camb., F.R.C.S. (B.).
- Scott, S. R., M.S., M.B., F.R.C.S.  
(B., 26).
- Thomson, Sir St. Clair, M.D.  
Lond. and Laus., F.R.C.P.,  
F.R.C.S. (KM.).
- Tilley, H., B.S., M.D., F.R.C.S.  
(UM.).
- Tod, H. F., M.D., B.Ch., M.A.  
Camb., F.R.C.S. (L.).
- Waggett, E. B., M.B., B.Ch., M.A.  
Camb. (C.).
- West, C. E., F.R.C.S. (B.).
- Medical Statistics*
- Greenwood, M., Junr., M.R.C.P.,  
M.R.C.S. Reader (U.).
- Medicine*, v. also Chem.—Path.,  
Dis. of Child., Path., Phar-  
macol.
- Abrahams, A., B.A., M.D., B.Ch.  
Camb. (W.).



- Beaumont, G. E., M.A., D.M. Ox.,  
 F.R.C.P., D.P.H. (M.).  
 Beddard, A. P., M.D., B.Ch., M.A.  
 Camb., F.R.C.P., F.R.C.S.  
 (G.).  
 Bennett, T. I., M.D. (M.).  
 Bolton, C., C.B.E., M.D., B.S.,  
 D.Sc., F.R.C.P., F.R.S. (UM.).  
 Bosanquet, W. C., M.A., D.M. Ox.,  
 F.R.C.P. (C., 24).  
 Box, C. R., M.D., B.S., B.Sc.,  
 F.R.C.P., F.R.C.S. (T.).  
 Bradford, Prot. Sir J. R., K.C.M.G.,  
 C.B., C.B.E., M.D., D.Sc.,  
 F.R.C.P., F.R.S. (UM.).  
 Branson, W. P. S., C.B.E., M.D.,  
 B.Ch., B.A. Camb., F.R.C.P.  
 (LW.).  
 Briscoe, Sir J. C., Bart., M.D.,  
 F.R.C.P. (KM.).  
 Broadbent, Sir J. F. H., Bart.,  
 M.D., B.Ch., M.A. Ox.,  
 F.R.C.P. (SM.).  
 Brown, W. L., M.A., M.D., B.Ch.  
 Camb., F.R.C.P. (B.).  
 Buzzard, E. F., M.D., B.Ch., M.A.  
 Ox., F.R.C.P. (T., 26).  
 Carlill, H., M.A., M.D., B.Ch.  
 Camb. (W.).  
 Cassidy, M. A., M.A., M.D., B.Ch.  
 Camb., F.R.C.P. (T.).  
 Chodak Gregory, Mrs. H. H., M.D.  
 (LW.).  
 Cockayne, E. A., M.A., D.M. Ox.,  
 Ch.B., F.R.C.P. (M.).  
 Collier, J. S., M.D., B.Sc., F.R.C.P.  
 (SG., 26).  
 Crawford, R. H. P., M.D., B.Ch.,  
 M.A. Ox., F.R.C.P. (KM.).  
 Dawson of Penn, The Rt. Hon.  
 Lord, G.C.V.O., K.C.M.G.,  
 C.B., M.D., B.Sc., F.R.C.P.  
 (L.).  
 De Souza, D. H., M.D., D.Sc.,  
 F.R.C.P. (W.).  
 Drysdale, J. H., M.D., B.Ch., M.A.  
 Camb., F.R.C.P. (B.).  
 Elliott, T. R., C.B.E., M.A., M.D.  
 Camb., F.R.C.P., F.R.S.  
 Prof. (UM.).  
 Evans, A. G., B.A., M.D. Camb.,  
 F.R.C.P. (B.).  
 Fawcett, J., M.D., B.S., F.R.C.P.,  
 F.R.C.S. (G.).  
 Fenton, W. J., M.A., M.D., B.Ch.  
 Camb., F.R.C.P. (C., 24).  
 Firth, A. C. D., M.A., M.D., B.Ch.  
 Camb., F.R.C.P. (LM.).  
 Forsyth, D., M.D., D.Sc., F.R.C.P.  
 (C.).  
 Fraser, F. R., B.A. Camb., M.B.,  
 Ch.B., F.R.C.P. Edin.  
 Prof. (B.).  
 French, H. S., C.B.E., M.D., B.Ch.,  
 M.A. Ox., F.R.C.P. (G.).  
 Golla, F. L., O.B.E., M.A.,  
 M.B., B.Ch. Ox., F.R.C.P.  
 (SG.).  
 Gosse, A. H., M.D., M.A. Camb.  
 (SM.).  
 Hadley, W. J., M.D. Durh.,  
 D.P.H. Camb., F.R.C.P.,  
 F.R.C.S. (L.).  
 Harris, W., B.A., M.D., B.Ch.  
 Camb., F.R.C.P. (SM.).  
 Hartley, Sir P. H.-S., C.V.O.,  
 M.D., B.Ch., M.A. Camb.,  
 F.R.C.P. (B., 24).  
 Hawkins, H. P., M.D., B.Ch., M.A.  
 Ox., F.R.C.P. (T.).  
 Head, H., M.A., M.D. Camb.,  
 F.R.C.P., F.R.S. (L.).  
 Herringham, Sir W. P., K.C.M.G.,  
 C.B., B.A., M.D. Ox. and  
 Dub., F.R.C.P. (B.).  
 Holmes, G. M., C.M.G., C.B.E.,  
 M.D., B.Ch., B.A.O., B.A.  
 Dub., F.R.C.P. (26).  
 Horder, Sir T. J., M.D., B.Sc.,  
 F.R.C.P. (B.).  
 Howell, C. M. H., M.A., M.D. Ox.,  
 F.R.C.P. (G.).  
 Hunt, G. H., M.A., D.M., B.Ch.  
 Ox., F.R.C.P. (G.).  
 Hurst, A. F., M.D. (v. Neurology)  
 (G.).  
 Kidd, P., M.A., D.M. Ox., F.R.C.P.  
 (L.).  
 Lakin, C. E., M.D., B.S., F.R.C.S.,  
 F.R.C.P. (M.).

- Langmead, F. S., M.D., F.R.C.P. (L.).  
 Prof. (SM.).
- Latham, A. C., M.A., D.M., B.Ch. Ox., M.A. Camb., F.R.C.P. (26).  
 (SG.).
- Lewis, Sir T., C.B.E., D.Sc. Wales, M.D., F.R.C.P., F.R.S. (23).  
 (UM.).
- MacCormac, H., C.B.E., M.B., Ch.B. Edin., F.R.C.P. (M.).
- Mackenzie, H. W. G., M.A., M.D. Camb., F.R.C.P. (T.).
- MacLean, H., M.D., Ch.B. Aberd., M.Sc. Liv., D.Sc. Prof. (T.).
- Marshall, G., O.B.E., M.D. (G.).
- Martin, S. H. C., M.D., B.Sc., F.R.C.P., F.R.S. (UM.).
- Miller, C. H., C.B.E., M.A., M.D., B.Ch. Camb., F.R.C.P. (L.).
- Miller, R. H., M.D., B.S., F.R.C.P. (SM.).
- Morison-Stewart, Sir J. P. M., K.C.M.G., C.B., M.D., C.M., M.A. Edin., F.R.C.P. (W.).
- Mutch, N., M.A., M.D., B.Ch. Camb., F.R.C.P. (also in *Pharmacol.*) (G.).
- Ogle, Cyril, M.A., M.D., B.Ch. Ox., F.R.C.P. (SG.).
- Parkinson, J., M.D., B.S. (L.).
- Perkins, J. J., M.A., M.B., B.Ch. Camb., F.R.C.P. (T., 24).
- Phear, A. G., C.B., M.D., B.Ch., B.A. Camb., F.R.C.P. (LW.).
- Poulton, E. P., M.A., M.D., B.Ch. Ox., F.R.C.P. (G.).
- Rolleston, Sir H. D., K.C.B., M.A., M.D., B.Ch. Camb., D.C.L. Durh., F.R.C.P. (SG.).
- Rowlands, R. A., O.B.E., B.Sc., M.D., B.S. (L.).
- Russell, A. E., M.D., B.S., F.R.C.P. (T.).
- Russell, J. S. R., M.D., C.M. Edin., F.R.C.P. (26).
- Ryle, J. A., M.D. (G.).
- Saunders, P. W., B.A., M.B. Tor., F.R.C.P. (LW.).
- Shaw, H. B., M.D., B.S., F.R.C.P., F.R.C.S. (UM., 24).
- Smith, L. A., M.D., F.R.C.P. (L.).
- Stewart, T. G., M.D., Ch.B. Edin., F.R.C.P. (26).
- Stoddart, W. H. B., M.D., B.S., F.R.C.P. (23).
- Stott, A. W., M.A., B.Ch. Camb. (W.).
- Taylor, J., C.B.E., M.A., M.D. Edin., F.R.C.P. (26).
- Tidy, H. L., M.A., D.M., B.Ch. Ox., F.R.C.P. (T.).
- Tooth, H. H., C.B., C.M.G., M.A., M.D. Camb., F.R.C.P. (B., 26).
- Torrens, J. A., M.D., B.S., F.R.C.P. (SG.).
- Tunncliffe, F. W., M.D. (KM.).
- Turner, W. A., C.B., M.D., C.M. Edin., F.R.C.P. (KM., 26).
- Turney, H. G., O.B.E., D.M., M.Ch., M.A. Ox., F.R.C.P., F.R.C.S. (T.).
- Wall, R. C. B., D.M., B.Ch., M.A. Ox., F.R.C.P. (L., 24).
- Ward, G. E. S., M.D., B.S., F.R.C.P. (M.).
- Wilson, C. McM., M.D., B.S., F.R.C.P. (SM.).
- Wiltshire, H. W., M.A., M.D., B.Ch. Camb., F.R.C.P. (KM.).
- Woodwark, A. S., C.M.G., C.B.E., M.D., B.S., F.R.C.P. (W.).
- Wynter, W. E., M.D., B.S., F.R.C.P., F.R.C.S. (M.).
- Young, R. A., C.B.E., M.D., B.Sc., F.R.C.P. (M., 24).
- Mental Diseases*
- Armstrong-Jones, Sir Robert, C.B.E., M.D., B.S., F.R.C.P., F.R.C.S. (B.).
- Chambers, J., M.A., M.D., M.Ch. R.U.I. (M.).
- Cole, R. H., M.D., F.R.C.P. (SM.).
- Craig, Sir M., C.B.E., M.A., M.D., B.Ch. Camb., F.R.C.P. (G.).
- Hart, B., M.D. (UM.).
- Macnamara, E. D., M.A., M.D., B.Ch. Camb., F.R.C.P. (C.).

- Norman, H. J., M.B., Ch.B. Edin.,  
D.P.H. Edin. & Glas. (W.).  
Phillips, J. G. P., M.D., B.S.,  
F.R.C.P. (23).  
Smith, R. P., M.D., B.S., F.R.C.P.  
(T.).  
Steen, R. H., B.A. R.U.I., M.D.,  
F.R.C.P. (KM.).  
Stoddart, W. H. B., M.D., B.S.,  
F.R.C.P. (T.).
- Wilson, S. A. K., M.A., B.Sc.,  
M.D. Edin., F.R.C.P.  
(KM., 26).

*Ophthalmology**Midwifery, v. also Diseases of  
Women*

- Cargill, L. V., F.R.C.S. (KM.).  
Collins, E. T., F.R.C.S. (27, C.).  
Eason, H. L., C.B., C.M.G., M.D.,  
M.S. (G.).  
Fisher, J. H., M.B., B.S., F.R.C.S.  
(T., 27).  
Flemming, P., M.D., B.S., F.R.C.S.  
(UM., 27).  
Goulden, C. B., M.A., M.Ch., M.D.  
Camb., F.R.C.S. (L.).  
Greeves, R. A., M.B., B.S., B.A.  
R.U.I., F.R.C.S. (M.).  
Grimsdale, H. B., B.A., M.B.,  
B.Ch. Camb., F.R.C.S. (SG.).  
Hepburn, M. L., M.D., B.S.,  
F.R.C.S. (LW., 27).  
Holmes, G. M., C.M.G., C.B.E.,  
B.A., M.D., B.Ch. Dub.,  
F.R.C.P. (27).  
Hudson, A. C., M.A., M.D., B.Ch.  
Camb., F.R.C.S. (27).  
James, R. R., F.R.C.S. (SG.).  
Jeremy, H. R., F.R.C.S., L.R.C.P.  
(L.).  
Juler, F. A., M.B., B.Ch., M.A.  
Camb., F.R.C.S. (SM., 27).  
Lang, B. T., B.A. Camb., F.R.C.S.  
(27).  
Lawson, Sir A., K.B.E., M.D.  
Brux., F.R.C.S. (M.).  
Lister, Sir W. T., K.C.M.G., M.B.,  
B.Ch., B.A. Camb., F.R.C.S.  
(L.).  
Lyle, H. W., M.D., B.S., F.R.C.S.  
(KM.).
- Andrews, H. R., M.D., B.S.,  
F.R.C.P. (L.).  
Blacker, G. F., M.D., B.S.,  
F.R.C.P., F.R.C.S. (UM.).  
Bourne, A. W., B.A., M.B., B.Ch.  
Camb., F.R.C.S. (SM.).  
Dodd, S., M.A., M.B., B.Ch.  
Camb., F.R.C.S.E. (W.).  
Eden, T. W., M.D. Edin., F.R.C.P.,  
F.R.C.S.E. (C.).  
Gilliatt, W., M.D., M.S., F.R.C.S.  
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M'Iloy, Anne L., O.B.E., M.D.,  
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Prof. of Obst. and Gyn.  
(LW.).  
Smith, G. Bellingham, M.B., B.S.,  
F.R.C.S. (G.).  
Smith, G. F. D., M.A., B.M., B.Ch.  
Ox., F.R.C.S. (SG.).  
Spencer, H. R., M.D., B.S.,  
F.R.C.P. (UM.).  
Stevens, T. G., M.D., F.R.C.S.  
(SM.).

*Neurology*

- Birley, J. L., M.A., D.M., B.Ch.  
Ox., F.R.C.P. (T.).  
Howell, C. M. H., M.A., D.M. Ox.,  
F.R.C.P. (26).  
Hurst, A. F., M.D., B.Ch., M.A.  
Ox., F.R.C.P. (G.).  
Saunders, P. W., B.A., M.B. Tor.,  
F.R.C.P. (26).  
Thomson, H. C., M.D., F.R.C.P.  
(M.).
- Moore, R. F., O.B.E., M.A., B.Ch.  
Camb., F.R.C.S. (B., 27).  
Ormond, A. W., F.R.C.S. (G.).  
Parsons, Sir J. H., C.B.E., D.Sc.,  
M.B., B.S., F.R.C.S., F.R.S.  
(UM., 27).  
Paton, L. J., M.B., B.Ch., B.A.  
Camb., F.R.C.S. (SM., 26).  
Spicer, W. T. H., M.A., M.B.  
Camb., F.R.C.S. (B., 27).  
Worth, C. A., F.R.C.S. (27).

*Pathology*, v. also Anat.—Morb.,  
Chem., Bact.

Andrews, Sir F. W., O.B.E., M.A.,  
M.D., B.Ch. Ox., F.R.C.P.,  
D.P.H. Camb., F.R.S. (recogd.  
in Bact.) Prof. (B.).  
Boycott, A. E., M.A., B.Sc., B.Ch.,  
D.M. Ox., F.R.S.

Graham Prof. (UM.).

Daniels, C. W., B.A., M.B. Camb.,  
F.R.C.P. (TM.).

Donaldson, R., M.A., M.D., D.T.M.  
Edin., D.P.H., F.R.C.S. (SG.).

Dudgeon, L. S., C.M.G., C.B.E.,  
F.R.C.P. (also in Bact.)

Prof. (T.).

Hicks, J. A. B., M.D., B.S., D.P.H.  
(recogd. also in Bact.) (W.).

Inman, A. C., M.A., M.B., B.Ch.  
Ox. (24).

Kettle, E. H., M.D. (SM.).

Lakin, C. E., M.D., B.S., F.R.C.P.,  
F.R.C.S. (also in Med.) (M.).

Lawrence, T. W. P., M.B., F.R.C.S.  
(UM.).

McIntosh, J., M.D., Ch.B. Aberd.  
Prof. (M.).

Perry, Bt. Lt.-Col. H. M. J.,  
L.R.C.P. and S.I. (AM.).

Stokes, A., O.B.E., M.D., B.Ch.,  
B.A.O. Dub. Dunn Prof. (G.).

Teale, F. H., M.D., B.Sc., F.R.C.P.  
(UM.).

Williamson, G. S., M.B., B.Ch.  
Edin. (LW.).

#### *Pathology, Experimental*

Lazarus-Barlow, W. S., M.D.,  
B.Ch. Camb., F.R.C.P.

Prof. (M.).

Martin, C. J., C.M.G., D.Sc. Shef.,  
D.Sc., M.B., F.R.S.

(Prof. L.I.).

Wright, Sir Almroth E., K.B.E.,  
C.B., M.D., B.Ch., Sc.D.

Dub., B.A. Camb., F.R.S.

Prof. (SM.).

#### *Pharmaceutics*

Greenish, H. G., F.I.C., F.L.S.,  
D. de l'U. Paris Prof. (28).

*Pharmacology*, v. also Med.

Clark, A. J., M.D., B.A. Camb.,  
F.R.C.P., D.P.H. Prof. (U.).

Hamill, P., M.A., M.D. Camb.,  
D.Sc., F.R.C.P. (B.).

Inchley, O., M.A., M.D., B.Ch.  
Camb. (K.).

Leyton, O. F. F., M.A., M.D., B.Ch.  
Camb., D.Sc., F.R.C.P. (also

in Med.) (L.).

Ransom, F., M.D. Edin.

Prof. (LW.).

Woolley, V. J., M.A., M.D. Camb.  
(T.).

#### *Radiology*

Reid, Sir A. D., K.B.E., C.M.G.,  
M.R.C.S., L.R.C.P. (T.).

*Surg.*, v. also Dis. of Child.

Adams, J. E., M.S. (T.).

Addison, O. L., M.B., B.S.,  
F.R.C.S. (25).

Armour, D. J., C.M.G., M.B., B.A.  
Tor., F.R.C.S. (26).

Back, I., M.A., M.B., B.Ch. Camb.,  
F.R.C.S. (SG.).

Ball, W. G., F.R.C.S. (B.).

Ballance, Sir C. A., K.C.M.G.,  
C.B., M.V.O., M.S., M.B.,  
F.R.C.S. (T.).

Bankart, A. S. B., M.A., M.Ch.  
Camb., F.R.C.S. (Ortho-

pædics) (M.).

Battle, W. H., F.R.C.S. (T.).

Bromley, L., M.B., M.Ch. Camb.,  
F.R.C.S. (G.).

Bryan, C. W. G., F.R.C.S. (SM.).

Burghard, F. F., C.B., M.D., M.S.,  
F.R.C.S. (KM.).

Carling, E. R., M.B., B.S., F.R.C.S.  
(W.).

Cheatle, Sir G. L., K.C.B., C.V.O.,  
F.R.C.S. (KM.).

Choyce, C. C., C.M.G., C.B.E.,  
B.Sc., M.D. Edin., F.R.C.S.

(UM.).

Clogg, H. S., M.S., M.B., F.R.C.S.  
(C.).

Cope, V. Z., M.A., M.D., M.S.,  
F.R.C.S. (SM.).

- Corner, E. M., B.Sc. Lond., M.A.,  
 M.Ch., M.B. Camb., F.R.C.S.  
 (T., 25).  
 Cunning, J., M.B., B.S. Melb.,  
 F.R.C.S. (LW.).  
 Daniel, P. L., F.R.C.S. (C.).  
 Davies-Colley, R., C.M.G., M.A.,  
 M.Ch. Camb., F.R.C.S. (G.).  
 De Santi, P. R. W., F.R.C.S. (W.).  
 Dunhill, T. P., C.M.G., M.D.,  
 B.S. Melb. (B.).  
 Eccles, W. McA., M.S., M.B.,  
 F.R.C.S. (B.).  
 Edwards, A. T., M.A., M.Ch.  
 Camb., F.R.C.S. (W.).  
 English, Sir T. C., K.C.M.G., M.B.,  
 B.S., F.R.C.S. (SG.).  
 Evans, A. H., O.B.E., M.D., M.S.,  
 F.R.C.S. (W.).  
 Everidge, J., O.B.E., F.R.C.S.  
 (KM.).  
 Fagge, C. H., M.S., M.B., F.R.C.S.  
 (G.).  
 Fedden, W. F., M.S., M.B.,  
 F.R.C.S. (SG.).  
 Fitzwilliams, D. C. L., C.M.G.,  
 M.D., Ch.M. Edin., F.R.C.S.  
 (SM.).  
 Frankau, C. H. S., C.B.E., M.B.,  
 B.S., F.R.C.S. (SG.).  
 Fripp, Sir Alfred D., K.C.V.O.,  
 C.B., M.S., M.B., F.R.C.S.  
 (G.).  
 Gask, G. E., C.M.G., F.R.C.S.  
 Prof. (B.).  
 Gordon-Taylor, G., M.A. Aberd.,  
 M.S., B.Sc., F.R.C.S. (M.).  
 Gould, E. L. P., M.A., M.Ch., D.M.  
 Ox. (M.).  
 Gray, H. T., M.A., M.Ch. Camb.,  
 F.R.C.S. (25).  
 Greene, W. H. C. (v. Anat.) (SM.).  
 Handley, W. S., M.D., M.S.,  
 F.R.C.S. (M.).  
 Howard, R. J., C.B.E., M.S., M.B.,  
 F.R.C.S. (L.).  
 Hughes, E. C., M.A., M.Ch. Camb.,  
 F.R.C.S. (G.).  
 Johnson, R., O.B.E., M.B., B.S.,  
 F.R.C.S. (UM.).  
 Joll, C. A., M.B., B.Ch. Brist.,  
 M.B., M.S., B.Sc. (LW.).  
 Lane, J. E., F.R.C.S. (SM.).  
 Legg, T. P., C.M.G., M.S., M.B.,  
 F.R.C.S. (KM.).  
 Lett, H., C.B.E., M.B., Ch.B.  
 Manc., F.R.C.S. (L.).  
 Lewis, Emily C., M.S., M.B.,  
 F.R.C.S. (LW.).  
 Lindsay, E. C., B.Sc. N.Z., M.B.,  
 B.S., F.R.C.S. (L.).  
 Low, V. W., C.B., M.D., B.S.,  
 F.R.C.S. (SM.).  
 Maybury, B. C., M.B., B.S.,  
 F.R.C.S. (T.).  
 Milne, R., M.D., M.S., F.R.C.S.  
 (L.).  
 Mitchiner, P. H., M.B., M.S.,  
 F.R.C.S. (T.).  
 Mullally, G. T., M.S. (W.).  
 Murray, J., M.B., B.Ch. Dub.,  
 F.R.C.S. (M.).  
 Neligan, G. E., B.M., B.Ch. Ox.,  
 F.R.C.S. (L.).  
 Nitch, C. A. R., M.B., M.S.,  
 F.R.C.S. (T.).  
 Norbury, L. E. C., M.B., B.S.,  
 F.R.C.S. (LW.).  
 Page, C. M., M.S., F.R.C.S. (T.).  
 Pannett, C. A., M.D., B.S., B.Sc.,  
 F.R.C.S. Prof. (SM.).  
 Pendlebury, H. S., M.A., M.B.,  
 B.Ch. Camb., F.R.C.S. (SG.).  
 Perrin, W. S., M.B., M.Ch. Camb.,  
 F.R.C.S. (L.).  
 Power, Sir d'A., K.B.E., M.A.,  
 M.B. Ox., F.R.C.S. (B.).  
 Rawling, L. B., B.A., M.B., B.Ch.  
 Camb., F.R.C.S. (B.).  
 Rigby, Sir H. M., K.C.V.O., M.B.,  
 M.S., F.R.C.S. (L.).  
 Roberts, J. E. H., O.B.E., M.B.,  
 B.S., F.R.C.S. (B.).  
 Romanis, W. H. C., M.A., M.B.,  
 M.Ch. Camb., F.R.C.S. (T.).  
 Rowlands, R. P., O.B.E., M.B.,  
 M.S., F.R.C.S. (G.).  
 Sargent, P. W. G., C.M.G., M.A.,  
 M.B., B.Ch. Camb., F.R.C.S.  
 (T.).

- Shattock, C. E., M.D., M.S.,  
F.R.C.S. (LW.).
- Sherren, J., C.B.E., F.R.C.S. (L.).
- Slesinger, E. G., O.B.E., B.Sc.,  
M.S., F.R.C.S. (G.).
- Smith, S. M., C.B., M.B., B.S.,  
F.R.C.S. (SM.).
- Souttar, H. S., C.B.E., M.A.,  
B.M., M.Ch. Ox., F.R.C.S.  
(L.).
- Spencer, W. G., O.B.E., M.S.,  
M.B., F.R.C.S. (W.).
- Steward, F. J., M.S., M.B.,  
F.R.C.S. (G.).
- Thompson, A. R., M.B., Ch.M.  
Manc., F.R.C.S. (G.).
- Trotter, W. B. L., M.D., M.S.,  
F.R.C.S. (UM.).
- Turner, P., M.S., M.B., B.Sc.,  
F.R.C.S. (G.).
- Turner, W., M.S., M.B., F.R.C.S.  
(W.).
- Vick, R. M., O.B.E., M.A., M.Ch.,  
F.R.C.S. (B.).
- Walker, Sir J. W. T., M.B., C.M.  
Edin., F.R.C.S. (KM.).
- Wallace, Sir C. S., K.C.M.G. C.B.,  
M.B., B.S., F.R.C.S. (T.).
- Walton, A. J., B.Sc., M.B., M.S.,  
F.R.C.S. (L.).
- Waring, H. J., C.B.E., M.S., M.B.,  
B.Sc., F.R.C.S. (B.).
- Waterhouse, Sir H. F., M.D.  
Edin., F.R.C.S. (C.).
- Watson, Sir C. G., K.B.E., C.M.G.,  
F.R.C.S. (B.).
- Waugh, G. E., B.A. Camb., M.D.,  
B.S., F.R.C.S. (25).
- Webb, C. H. S., M.S., M.B.,  
F.R.C.S. (M.).
- Webb-Johnson, A. E., C.B.E.,  
M.B., Ch.B. Manc., F.R.C.S.  
(M.).
- West, Lt.-Col. J. W., M.B., B.Ch.,  
B.A.O., N.U.I., M.S. Belf.,  
D.P.H.I. (Mily. S.) (AM.).
- Williams, G. E. O., M.D., M.S.,  
F.R.C.S. (UM.).
- Wilson, H. W., M.B., M.S.,  
F.R.C.S. (B.).
- Tropical Hygiene*  
Simpson, Prof. (v. Hyg.) (TM.).
- Trop. Med.*  
Hewlett, Prof. (v. Bact.) (TM.).  
Low, G. C., M.A. St. And., M.D.,  
C.M. Edin. (TM.).  
Newham, H. B. G., C.M.G., M.D.,  
D.P.H., D.T.M. Camb. (TM.).
- Trop. Surg.*  
Cantlie, Sir J., K.B.E., M.A.,  
M.B., C.M. Aberd., F.R.C.S.,  
D.P.H. (TM.).
- Oriental Languages, v. also Semitic
- Arabic*  
Arnold, Sir T. W., C.I.E., Litt.D.,  
M.A. Camb. Prof. (O.).  
Sefi, A. (O.).
- Bengali*  
Page, Rev. W. S., B.D. St. And.,  
B.A. Reader (O.).
- Burmese*  
Hough, A. L. (O.).
- Chinese*  
Rees, W. Hopkyn, D.D.  
Reader (O.).
- Gujarati*  
Doderet, W., M.A. Camb. (O.).
- Hindustani (Hindi and Urdu)*  
Bailey, T. G., M.A., B.D., D.Lit.  
Edin. Reader (O.).  
AbdulQayum Malik, B.A. All. (O.).
- Japanese*  
Khorl, T. (O.).  
McGovern, W. M., D.Lit. Ox. (O.).
- Malay*  
Blagden, C. O., M.A. Ox.  
Reader (O.).
- Pali Lit.*  
Davids, Mrs. C. A. R., M.A. (O.).
- Persian*  
Ross, Sir E. D., C.I.E., Ph.D.  
Stras. Prof. (O.).  
Wilson, C. E., B.A. (O.).

# LONDON

I

<i>Sanskrit</i>	[Prof. (O.).	<i>Tibetan</i>	
Turner, R. L., M.A. Camb.		Thomas, F. W., M.A. Camb., Ph.	
Barnett, L. D., M.A., Litt.D.		Munich	Reader (U
Manc., M.A. Camb.	(O.).		
<i>Sinhalese, Tamil, and Telugu</i>		<b>Adult Education</b>	
Wickremasinghe, M. da Z., M.A.		Staff Tutor and about 70 Lectr	
Ox.	Reader (O.)	v. p. 120.	

## GENERAL INFORMATION

[NOTE. *The University authorities desire that it should be clearly understood that they can accept no responsibility for any information concerning examns. or procedure except such as is contained in their own official Regulations. These can always be obtained on application at the Univ. offices.*]

Central offices—South Kensington, S.W.7. Telegraphic address—Universi  
Southkens, London. Telephone—Kensington 7000.

The Univ. was constituted by Royal Charter in 1836 as a body empowered to grant degrees to students of approved institutions after examination, and until 1900, its work was confined to the examination of students. The system whereby entrance to its examns. was restricted to students of certain affiliated Colleges was abolished, except for examns. in Medicine, in 1858. In 1861 its degrees were thrown open to women, London being the first of the Universities of Great Britain to adopt this policy.

In 1900 the Univ. was reconstituted so as to strengthen the ties between it and the institutions engaged in Higher Education within a radius of 30 miles. The Senate is empowered to admit as *Schools of the University* institutions situated within the administrative county of London and not carried for the private gain or profit of the owners which provide education of University standard, and is required to obtain reports at prescribed intervals on the efficiency of such schools. A special form of recognition may be given to an institution within the same area founded for research or the cultivation of any special branch of science or learning, and the Lister Institute of Preventive Medicine and the School of Oriental Studies have been admitted in this category. The Senate has power also to recognize as Teachers of the Univ. members of the teaching staff of public educational institutions within a radius of 30 miles, whether Schools of the Univ. or not. Matriculated students of Schools of the Univ. or studying under such *Recognized Teachers* are eligible under certain conditions for registration as *Internal Students*, and are allowed after pursuing Approved Courses of Study, to enter for the "Internal" examns. of the Univ. *External Students* may pursue their studies where they please, and are admitted, without any conditions as to attendance at Approved Courses, to examns. for degrees in all subjects except Medicine, Mining, and Architecture. The examns. for Internal and External students are in some cases separate, in others identical, but the statutes require that "the degrees conferred on both classes of students shall represent as far as possible the same standard of knowledge and attainments."

Since the reconstitution of the Univ., its two original colleges, University College in 1905 and King's College in 1908, have been incorporated in it, the Senate which is the supreme Univ. body, taking over the responsibility for the administration.

**LIBRARIES.** The Libraries belonging to and connected with the University contain in the aggregate about half a million volumes, distributed over every branch of knowledge. The Univ. Library in the Central Building, S. Kensington

contains about 100,000 volumes and pamphlets. It provides well-equipped special collections to promote research work and also serves as a lending library from which students can borrow expensive works for home study. It includes the Goldsmiths' Library of Economic Literature (45,000 vols.), which is restricted to purposes of research and reference. The British Library of Political Science at the London School of Economics has 160,000 vols. There are, in addition, large departmental libraries in the several Colleges and various collections of books on special subjects, too numerous for mention. Access can also be obtained to the library of the British Museum, the largest in the world, with 2½ million printed books, the Record Office, and numerous other collections. Full particulars are given in *The Libraries of London: a Guide for Students* (v. *infra*—Publications).

**MUSEUMS.** Among the many Museums which, in addition to those belonging to the Schools and Institns. of the Univ., are accessible to students in London are the British Museum (Antiq. and Nat. Hist.); Horniman (Anthrop. and Zool.); London; Parkes (Sanitary Science); Practical Geol.; Roy. Archit. Soc.'s; Roy. Coll. of Surgeons'; Science, S. Kensington (Mech., Nav., and Struct. Engin., Phys., Maths., Chem., Physiog., Geol., and Biol.); Sir John Soane's (Art and Antiquarian); Victoria and Albert, S. Kensington (Archit. and Sculpture, etc.). **LABORATORIES**, v. p. 128 and the sections relating to the several colleges and schools of the Univ.

**FACULTIES.** Theology, Arts, Laws, Music, Medicine, Science (including Agriculture, Horticulture, Veterinary Science, Household and Social Science, Estate Management), Engineering, Economics and Political Science (including Commerce and Industry).

*Standing Committees of the Senate.* The more important are—The Academic Council, the Council for External Students, the Board to Promote the Extension of Univ. Teaching, the Matricn. Board, the Establ. and Genl. Purposes, Finance, Library, and Scholarships Committees. There are 26 other Committees besides the 41 Boards of Studies.

**DEGREES.** B.D., D.D.; B.A., M.A., D.Lit.; LL.B., LL.D.; B.Mus., D.Mus.; M.B., B.S., M.D., M.S.; B.D.S.; B.Sc., M.Sc., D.Sc.; B.Com., M.Com.; Ph.D. (in Faculties of Theol., Arts, Science, and Econ.).

The B.Sc. and D.Sc. are granted in the Faculties of Science (including Pure Sc., Agric., Hortic., Vet. Sc., and, for External students, Estate Management, and, for Internal students, Household and Social Science—B.Sc. only), Engineering, and Economics; the M.Sc. in Science (including Agric., Vet. Sc., and, for Internal students, Hortic.), Economics, and, for Internal students, Engineering.

**ADMISSION.** The Univ. holds 3 times a year in London and twice a year in certain Provincial centres a Matricn. examn. open to all persons of 16 yrs. of age and upwards. The examn. can also be held by special arrangement in any of the British Colonies or Dominions. Candidates are required to pass on one and the same occasion in 5 subjects: English, Maths., Latin or Greek or a scientific subject, 2 other subjects of which one must, if neither Latin nor Greek is chosen for 3rd subject, be a language. The General School examn. (v. p. 121), if passed in a combination required for Matricn., is equivalent to the Matricn. examn., and several other examns. are also accepted on conditions as exempting from it, namely, those numbered 2, 6, 7, 8(a), 8(b), 9, 10, 19, in Appendix xx., and Matricn. examns. of the Univs. of Adelaide, Melb., and W. Aust.

**STUDENTS FROM OTHER UNIVERSITIES.**—The graduates of any of the Univs.



of the United Kingdom and of some Colonial Univs. can also claim exemption. Other students of 19 yrs. of age and upwards who present certificates of Matriculation in Colonial Univs. or Indian or foreign certifs. from educational authorities indicating an education equivalent in their own country to that required in England for the Matriculation examn. may apply for *examination und Statute* 116 with special reference to the line of study they propose to follow. This examn., which it has been the practice to hold four times a year, is held in London only. Students who do not propose to proceed to a degree are not required to pass any Univ. examn., but must submit evidence that they are sufficiently advanced in their studies.

EXTERNAL students preparing for the Bachelorship undergo Intermediate and Final examns. at intervals prescribed in the Regns., and approximately (except in Med. and Vet. Sc.) to 3 yrs. in all. Copies of all Regns. may be obtained gratis and post free from the External Registrar.

EXAMINATIONS IN THE OVERSEAS DOMINIONS. Certain of the examns. of the Univ. for External students are held not only in London and at Provincial centres within Great Britain, but also in certain of the overseas Dominions of the Empire. In India only the examns. in the Faculty of Theol. are held, but the Matriculation examn. and the examns. in Theol., in Arts, in Law and in Economics have been held at 70 Colonial centres. In Ceylon the Univ. examns. in Science and Arts have also been held under special arrangement; this latter case with certain modifications of the Regns., such as have made them suitable for the special needs of the Colony in question; with the result that the Ceylon Govt. now awards its scholarships upon the results of the Univ. examns.

An INTERNAL student before being allowed to enter as such for any exam must, unless specially exempted, have attended Instruction courses in all the subjects thereof. For a first Degree in any Faculty he must have completed an Approved Course of Study extending over at least 3 yrs. which must ordinarily, have been continuously pursued, but not necessarily all at one institution. A minimum number of hours of attendance is as a rule prescribed for each course, and a reduction is allowed in the case of an evening student who is certified by an employer to be engaged in his service for not less than 25 hours a week. The Intern. course generally extends over 1 yr. As a general rule, Honours may be taken at the Final examns. A course of study extending over not more than 1 yr. taken in another Univ. approved for this purpose (Paris, Caen, Montpellier, Grenoble, Lille, Madrid and Freiburg have been so approved) subsequently to a student's passing the Intern. may be accepted subject to regns. in lieu of a course taken in this Univ.

N.B. *In the following notes regarding the several Faculties the Institution in which the courses may be taken by Internal students are indicated by Initial letters and numbers referring to the list on pp. 89, 90 above.*

ARTS. U., K., Ho., BW., EL., E., Wf., Bk., N., R., J., 1, 4, 6, 8, 11, 12 (Pedagogy—K., BW., Tr., 14, 15). In both Intern. and Final (Pass) examn.

\* The following are approved Univs.: In Canada—Alb., Dal., King's, McG., McM. (B.A. only), Manit., Qu., Tor., Vict.; Australasia—Adel., Melbourne, Syd., Tas., W.A. (Arts, Sc., Agr., Eng.), N.Z.; S. Africa—Cape, Cap Town, S. Afr., Stell.; India—Aligarh, All., Bom. (L.M. and S. also recognized Calcutta, Dacca, Mad., Mys., Panj., Rang.; Hong-Kong.

2 langs. must be taken, including either Latin with Rom. Hist., or Greek with Greek Hist. Natives of Asia or Africa may apply for permission to substitute for Latin or Greek—Classical Arabic, Classical Sanskrit, or Classical Chinese. External students may take Honours papers in certain subjects in the Interm. examn. The Honours subjects for the Final examn. are Archæol., Chinese, Classics, Hebrew and Aramaic (including Syriac), Hist., Geog., Maths., Philos., Psych., Engl., French, Ger., Ital., Span., Slavonic Studies, Classical Sansk. and Pali, Arabic, Persian, also Celtic for External students, and, for Internal students, Greek, Latin, Portuguese, Polish, Dutch, Sociology.

The B.A. course in Archit. extends over 5 yrs., but graduates of approved Univs. may be exempted from such part of the earlier years' courses of study and examns. as the Senate may determine.

The M.A. is conferred in Archæol., Class., Hist., Maths., Mediæval and Mod. Langs., Oriental Langs., Philos., Educn., and, for Internal students only, in Comp. Philol. and Psychol. Internal students are required (except in Maths.) to submit a thesis. In some cases candidates must have taken Honours at the B.A. examn. External students may take the M.A. examn. 2 yrs. after graduation in Arts. For them a thesis is optional, except in Educn. Candidates may only take 1 branch or section at a time. In most there is a *viva-voce* examn.

The D.Lit. is open to M.A.'s and Ph.D.'s only (except as regards students excused under Statutes 113 and 129—v. p. 118), and is conferred for original work; minimum age—30, or 5 yrs. after passing Ph.D. or M.A. examn.

*Diplomas.* Teacher's, 1 yr. course for graduates and others similarly qualified (also for External students); Fine Art (3 yrs.); Dramatic Art (2 yrs.); Slavonic studies (2 yrs.); History (4 yrs. part-time or 1 yr. full-time); History of Art (4 yrs. part-time); Journalism (2 yrs.); Literature (4 yrs. part-time or 1 yr. full-time); Town Planning and Civic Archt. or Civic Engin. (2 evenings a week for 2 terms or 1 day a week for 3 terms); Academic Dip. in Geog. (180 hours); External Dip. in Geog.; Sociol., etc. (v. *infra*, Econ.); Librarianship (2 yrs. for day students, 3-5 yrs. for evening students); Academic Dip. in Psychology.

SCIENCE.\* U., K., Im., Ho., BW., EL., E., Wf., Bk., B., T., G., 1, 2, 4, 5, 8, 10, 11, 12, 13, 28 (Agriculture—Ag.; Vet. Sc.—9). For the Interm. examn. Pure Maths. or Applied Maths. or Phys. must be taken with 3 other subjects. External students may take Honours papers in certain subjects. For the Final (Pass) examn. any 3 of the following may be selected: Pure Maths., App. Maths., Astron., Physics, Chem., Geol., Bot., Zool., Physiol., Psych., Anthropol., Milit. Sc., Logic and Method (Ext. students), Statistics (Int. students). An Honours student selects 1 principal subject and (except in the case of a candidate for Honours in Human Anatomy and Morphology) 1 subsidiary subject. For the Degree in Agric. the Interm. examn. includes Chem., Bot., Zool., and 1 selected subject; the Final—Agric., Agric. Chem., Agric. Bot., and 2 selected. Internal students may take the B.Sc. "by Research" (v. p. 119). For the Degree in Hortic. the Interm. subjects are Chem., Bot., Zool., Physics, Geol., and Surveying; for the Final, Practice of Hortic., Book-keeping, Principles of Hortic., and Entom. For the Degree in Vet. Sc. there are 4 examns. to be taken in their proper order: Prelim. (Inorg. Chem. and Phys.), Interm. Pt. I. (Org. and Applied Chem., Genl. Biol., and Vet. Anat.), Pt. II. (Vet. Physiol.), and Final (Vet. Pathol. and Vet. Hyg.). For the M.Sc. a thesis is required except in Maths. There is no Doctorate in Agric. or in Vet. Sc., Bachelors of Science (Agric. or Vet. Sc.) being held to be eligible for the ordinary D.Sc. For the Degree in Household and Social

Science there are 3 examns.: 1st Interim. (Phys., Inorg. Chem., Biol., and Social and Econ. Hist.); 2nd. (Chem.—Org. and Phys., Gen. and Econ. Biol., Principles of Econ.); and Final (App. Chem., Physiol. and Bio-Chem., Hygiene, and Bacteriology). For the Degree in Estate Management—B.Sc. (Est. Man.)—there are 2 examns., Interim. and Final. Interim.: Pt. I.—Surveying, Econ., and Agric. or Town Planning; Pt. II.—Accounting and Land Law; (Pts. I. and II. may be taken separately). Final: Pt. I.—Land and Buildings Valuation, Taxation and Tithe, Land Law; Pt. II.—Building Construction, and Agric. or Town Planning, and two of—Forestry, Urban Sanitation, Munic. and Local Govt. Law; (Pts. I. and II. may be taken separately).

**THEOLOGY.\*** N., H., R., K.T., J., W.R. The Interim. course is in Bibl. Langs., Greek, Latin, Psych., and Philos.; the Final in Old Test., New Test., Bibl. and Hist. Theol., Church Hist., Philos. Introdn. to Theol., and a selected subject. The Honours examn. is distinct from the Pass, and may be taken 1 yr. after graduation in Div.; the subjects are Hebrew and Aramaic, including Syriac, Greek N.T. and Apocrypha, Church Hist., Bibl. and Hist. Theol., Study of Religion. Candidates for the D.D. degree must have taken Honours in Theol. in this Univ.

**LAWS.\*** U., K., and E. (under a joint scheme). The subjects of the Interim. course are Hist. of Rom. Law, Engl. Const. Law and its Hist., and Jurispr. Candidates for the LL.D. degree must have taken Honours at the LL.B. examn. or subsequently unless specially exempted.

**MEDICINE.** The course extends normally over 5½ yrs. In the first yr. courses in Inorg. Chem., Phys., and Genl. Biol. in preparation for the 1st examn. for Med. degrees are taken. The 2nd and 3rd yrs. are devoted to Org. and Applied Chem. (the only subject at Pt. I. of the 2nd examn., taken not less than 6 mos. after passing the 1st), Hum. Anat. and Embryol., Physiol., Pharmacol., including Pharmacy and Mat. Med. Pt. II. of the 2nd examn. is normally taken about 2½ yrs. after Matricn. In the Final course for the M.B., B.S. degrees the subjects are divided into 2 groups as follows: Group I.—Med., Path., For. Med. and Hyg.; Group II.—Surg., and Midw. and Dis. of Women. The groups may be taken separately or together, but degrees are not conferred until candidates have passed in both groups.

Institutions outside the U.K. certificates from which for the complete course of Med. educn., including Clin. Med. and Surg. preparatory to the M.B., B.S. degrees, are accepted by the Univ. of London: Univs. of Bishop's Coll., McGill, Adel. (with Infirmary), Melb. (with Melb. and Alfred Hospls.), Syd. (with Infirmary and Prince Alfred Hospl.), N.Z. (with Dunedin Hospl.); following Indian Med. Colleges—Grant (Bombay), Bengal (Calcutta), Lahore, Madras; Med. Coll., Colombo; Univ. of Malta; Sch. of Med., Cairo.

The M.D. may be taken in any of the following: Med., Path., Psych. Med., Midw. and Dis. of Women, State Med., Trop. Med.

The M.S. may be taken in Surg., Dent. Surg., Ophth., or Larynx, Ot., and Rhin.

For the M.D. or M.S. a thesis or published work may be submitted.

The course for the B.D.S. extends normally over 5 years—there are four examns. The subjects of the Final examn. are Dental Surgery, Operative D.S. and Orthodontics.

*Diploma in Psychological Medicine.*

**MUSIC.\*** 2, 19, 20, 21. The subjects for the Interim. examn. are Harmony, Counterpoint, and Hist. of Mus. For the B.Mus. the subjects of

\* v. Note on p. 115.

examn. are Harmony; Counterpoint, Fugue, and Canon; Free Composition; Hist. of Music; and Musical Analysis. Every candidate for the B.Mus. must submit a musical exercise. For the D.Mus. there is a written examn., and a musical exercise is also required.

**ENGINEERING.\*** U., K., Im., BW., E.L., 2, 5, 7, 8, 11, 12, 13. The same Interm. examn. is taken by all students whether intending to graduate in Engin., Mining, or Metall., the subjects being: Pure Maths. and Applied Maths., Heat, Elec. and Magn., Engin. Drawing and Design, and either Sound and Optics or Chem. or Geol. In the Final examn. in Engin. not less than 5 subjects are taken, a wide choice being allowed; in *Mining* 6, of which Mining Geol. and Mineral, Mining, Mine Surveying, Mineral Dressing, and Assaying are compulsory; in *Metall.* 6, of which Metall., Metall. Analysis, Metallography and Pyrometry, Electro-Metall., and Fuel and Refractory Materials, are compulsory. For an Honours degree in Engin., Mining, or Metall. at least 1 extra subject must be taken at the Final examn. and a higher standard reached in all the subjects taken.

**ECONOMICS.\*** U., K., E., Bk., 4. The subjects for the Interm. examn. are Econ., British Constitn., either Maths. or Logic and Scientific Method, Geog. For the Final (in and after 1924)—Econ., Hist. of the Great Powers, Political Sc., and a selected subject. Passages are set from French and German works for translation and comment.

For the B.Com. the Interm. examn. is in 2 parts, which may be taken together or on different occasions. Pt. I.—Elements of Econ., Geog., an approved Modern Lang. Pt. II.—Accounting as applied to Traders and Trading Companies, or a second Approved Mod. Foreign Lang.; 1 selected subject. The B.Com. examn. is in: the Present Organization of Industry, Banking, Trade, and Transport; Modern Econ. Development of the Empire, and the more important Foreign countries; Elements of Comml. Law; Statistical Method; 1 selected group of subjects.

**Diplomas.** Academic Dip. in Sociology and Social Administration (2 yrs.' course, at least 150 hours in each); Dip. in Economics and Social Sc. (4 yrs.' part-time or shorter full-time course), *either* E. Hist. and Theory, Soc. and Pol. Sc., or Conditions of Soc. and Indust. Well-being and of Health—Dip. for Civic workers.

**MILITARY EDUCATION.** London is one of the Univs. which have established approved courses of instruction entitling them to nominate candidates for commissions in the Regular Army. The selection of qualified students is made by a Nomination Board consisting of the members of the Milit. Educn. Committee together with one or more Milit. members appointed by the War Office, who have the right of veto on any selection. An Internal degree in one of the Faculties other than Theol., Med., and Music is one of the necessary qualifications. Since 1912 Military Science has been an optional subject for the Interm. and Final (Pass) B.A. and B.Sc. examns. The Officers' Training Corps Contingent supplied 4200 officers for the war, of whom 650 are known to have fallen.

**POST-GRADUATE STUDY AND RESEARCH.** In most of the Colleges and Schools of the Univ. special arrangements are made for Research students, and the facilities offered are not restricted to Internal graduates of the Univ. Under Statutes 113, 113a, and 129 External graduates and graduates of, and persons who have passed the degree examns. of, other approved Univs. are allowed, under certain conditions, to enter as Internal students for the

\* v. Note on p. 115.

degree of Bachelor or Doctor in the several Faculties (but not in Medicin and Surgery), and for the degrees of Master of Arts and Master of Science. Application for registration may be submitted with evidence of graduation, etc., through the authorities of the College, School, or Institution at which the applicant proposes to study, and supported by their certificate of his fitness to undertake a course of study or research with a view to the proposed degree, and that they are willing to supervise his work. An Overseas student may himself submit an application on the prescribed form, and the University will, if so requested, advise as to the selection of the College, School, or Institution at which, and Teacher under whom, he should study. Application for such advice should be addressed to the Academic Registrar. Overseas students should apply for registration before coming to London, and their applications should reach the Univ. by May 1, or, if from Australia or New Zealand, March 1, to enable them, should their applications be successful, to enter upon their course of study in Oct., *i.e.* at the beginning of the Session. Students whose applications are approved are required to pursue a course extending over at least 2 yrs. (*v. infra*—Publications).

An Internal student who is a candidate for the Ph.D. degree must have previously graduated in the Univ. in the faculty of Theology, Arts, Science or Economics, or have been registered as a candidate for the degree under the terms of Statute 113 or 129. An Internal student is further required to pursue a course of study of not less than two years' full-time, or four years' part-time training in research and research methods. Any graduate of the Univ. may become a Candidate for the Ph.D. degree as an External Student on receiving the approval of the Council for External Students.

The B.Sc. degree, in the Faculties of Science and Econ., may also be taken "by Research" by Internal students under Statute 112. Candidates must have attained the age of 19 and must have passed the Intern. examn. The research must extend over at least 2 yrs.

FEES.—Matricn.—2½ gs.; Examn. and Graduation—15 gs. (Med., 29 gs. for first Degree. Other Degree fees, 10 to 20 gs. Tuition, see the section relating to the several colleges.

STUDENTSHIPS AND SCHOLARSHIPS. Studentships are awarded by the Senate in aid of advanced work or research. These include one of £50 p.a. for 1 or 2 yrs., open to students of Univ. Coll. in Maths.; one of £100 in Archæology; £120 and £50 in Physiol.; £100 in Arts; £100 in Econ.; £200 for the man or woman who, being resident in London and a graduate of the Univ. has done most in the preceding 5 yrs. to advance Medical Art or Science; £200 for a graduate of a British Univ. for the promotion of post-graduate research. The Gilchrist Trustees provide funds for two Studentships, viz. one of £100 for a woman graduate preparing for a profession; and one in Mod. Langs., £80, open to a B.A. who took Honours in French or German, for a course of study abroad with a view to the profession of teaching. Three Scholarships of £50 each for 1 yr. are awarded annually for proficiency in Oriental Langs. The Scholarships Pamphlet obtainable post free on application to the Univ. gives details of these and others.

AN APPOINTMENTS BOARD (Secy.—H. J. Crawford, B.A.) co-ordinates and supplements work done by the Schools and Institns. of the Univ. Registrar fee, 10s. 6d. for one year and 5s. p.a. afterwards. Its work is associated with the Commerce Degree Bureau, *v. p.* 129. A pamphlet with full information may be obtained from the Secy., 46 Russell Sq., W.C.1.

RESIDENCE. Hostels recognized by the Senate: Univ. Hall of Residence

10 and 11 Carlyle Square, Chelsea; Univ. Coll. Hall, Ealing, for 40 men students (fees for residence, 30s. to £3 a week); College Hall, Byng Place, Gordon Square, W.C., for women students; King's Coll. Theological Hostel, Vincent Square; The Platanes, Denmark Hill, S.E., for King's Coll. and its Med. School. Residence is also provided at or in connexion with the S.E. Agric. Coll., Wye, Bart's, Guy's and Middlesex Hospl. Med. Schools, the Theological Colleges at Hampstead and Highbury, and the Women's Colleges.

A UNION SOCIETY on the lines of those of Oxford and Cambridge was founded in March 1921.

UNIVERSITY EXTENSION DEPARTMENT. The work of the *Board to Promote the Extension of Univ. Teaching* falls under the following heads: (a) Univ. Extension Lectures and Tutorial Classes for Working-people; (b) Holiday Courses for Foreigners; (c) Inspection and Examn. of Schools; (d) Examn. for the Certif. in Religious Knowledge; (e) Examns. for the Certifs. in Danish, English (for foreigners), French, German, Italian, Norwegian, Russian, Spanish, and Swedish; (f) Examns. for Diplomas in History, Literature, Economics and Social Science, History of Art; (g) Examn. for Diploma in Psychological Medicine.

(a) *Univ. Extension Lectures* have been carried on by the Board since 1902, and, prior to that, since 1876, by the London Society for the Extension of Univ. Teaching. By agreement with the Univs. of Oxford and Cambridge the work is restricted to the Metropolitan area. Courses are held, at about 60 centres, on Hist., Lit., Art, Econ. and Social Sc., Philos., Psychology, and Nat. Sc. A class is held in connexion with each lecture, and students are encouraged to do regular paper-work for the lectr. An examn. for certifs. may be held at the end of each Sessional (24 or 25 lectures) or Terminal (10 or 12 lectures) course. A few short courses (5 lectures) of a *pioneer* or illustrative character are arranged; in connexion with these there is no examn. Continuous study over several years is encouraged by the Vice-Chancellor's Certif. of Continuous Study (awarded to students who obtain 4 Sessional Certifs. in subjects chosen from certain groups) and by the *Diplomas in the Humanities* (Hist., Lit., Econ. and Social Science, Hist. of Art), awarded, under the Seal of the Univ., to students who carry on an approved co-ordinated course of study covering 4 yrs., and pass an examn. on the work of each Session, and a final examn. on the whole course.

The *Tutorial Classes for Working-people* are under the immediate direction of a Joint Committee of 7 members nominated by the Board and 7 nominated by the Workers' Educational Association. The classes extend over 3 consecutive years, and membership is limited to not more than 32 students, who undertake to attend regularly and to do regular paper-work for the Tutor. Certifs. are not awarded. There were 36 classes in 1921-22.

(b) A *Holiday Course* for Foreigners is held annually in London during four weeks from the middle of July. Special stress is laid upon Phonetic teaching. The course is designed to widen the student's knowledge not only of the Engl. Lang., but of English customs, instittns., and art, by means of lectures, classes, a choral society, excursions, etc. The total number of students admitted to the course is limited to about 260, and the number in each class to 8. During the 15 years 1904-1914 and 1919-1922 the course was attended by 3562 students from 33 countries.

(c) *Inspection and Examination of Schools*. A close relationship between examination and inspection has been carefully and continuously developed by the Univ. Extension Board. The County Councils of Surrey and Middlesex

have placed their Secondary Schools to the number of 56 under the Univ. for regular inspection and for the holding of the School examns., the local authority in each case making a special financial arrangement with the Univ. The Board of Educn. and the Univ. inspect alternately and exchange Reports.

*Inspection* may include either a general inspection of the whole school or a special inspection of certain subjects or groups of subjects. It may be so combined with the Certificate examns. that these form an integral part of it. It may also include an examn. carried on by the Inspectors and the Staff of the school in co-operation. This system of combined inspection and examn. is known as Examinational Inspection, and is capable of considerable variation to meet the requirements of any particular school.

The *Examinations for Certificates* are held only in Schools inspected by the Univ. or under other approved inspection; the course of study in the school must also be approved. The examns. are of 3 grades: I. Higher, II. General, and III. Junior, for I. the (a) Higher School, (b) External Intermediate (Arts or Science) Certif.; II. the (a) School, (b) Matricn., or (c) School Commercial Certif.; and III. the Junior School Certif., respectively. Certifs. I. (a), II. (a), and II. (c) are not awarded until the pupil leaves school. The Examn. fees are from 1 to 3 gs.

The *Higher and General School Examinations* are recognized by the Board of Education as "Second" and "First" examns. (v. p. 5) respectively, and the Certifs. I. (a) and II. (a) awarded to candidates attending schools recognized by it as efficient Secondary Schools are attested by it. A candidate who takes the *Higher* with a view to qualifying for the External Intermediate Arts or Science Certif. offers for examn. the same syllabuses as those of the Ext. Intern. examns. The combination of subjects that may be taken at the General School examn. offers greater variety than is the case in the Matricn. examn., and a pupil who reaches the necessary standard at one and the same examn. in a combination required for Matricn. is entitled on payment of the registration fee of 12s. 6d. to be registered as a Matriculated student of the Univ., if or when he has attained the prescribed age. For Certif. II. (c) the combination of subjects required differs from that required for II. (a), and the subjects are treated from the commercial standpoint. The Senate have established a Panel of Advisors, consisting of a number of the leading authorities on Comm. subjects, to advise them in matters of policy and principle in connexion with the Scheme.

The *Junior School Examination* is intended for pupils about the age of 15.

In the case of each of the School examns. an Inspector visits the school for the purpose of conducting an oral examn. in such Mod. Langs. as are taken. Practical examns. in Science are optional, except in the case of grade I. and in Genl. Elem. Science at grade II., in which they form an essential part of the examn.

(d) The *Examination for the Certificate in Religious Knowledge*, instituted in 1909, is held once a year in June. It may be held at any of the Provincial centres at which the June Matricn. examn. is appointed to be held, as well as in London.

(e) *Examinations for the Certificates in French and in German* (instituted in 1913), in *Italian, Russian, and Spanish* (instituted in 1919), and in *Danish, Norwegian, and Swedish* (instituted in 1921) are held in July and Aug.; in *English* (for foreigners; instituted in 1920) in Aug. or as may be arranged. They are intended primarily for teachers who are not specialists in, but who require a Certif. testifying to their practical working knowledge of, the language, both spoken and written.

(f) The *Examinations for the Diplomas in History; Literature*—English Lang. and Lit. or General Lit.; *Economics and Social Science*—either Economic History and Theory, Social and Political Science, or Conditions of Social and Industrial Well-being and Conditions of Health (Dip. for Civic Workers); *History of Art*—are held once a year in Oct. for students who have followed a recognized course of study for 4 yrs. as part-time students or for a shorter period as full-time students.

(g) The *Examn. for the Diploma in Psychological Medicine* is held twice a year, in March and Apr. and in Oct. and Nov., and is open to candidates whose names are in the Medical Register. There are two varieties of this Dip., for those desiring to specialize in Mental Diseases and in Mental Deficiency respectively.

[Further information and copies of the Regns. may be obtained from the University Extension Registrar, University of London, South Kensington, S.W.7.]

PUBLICATIONS. The following are obtainable from the Univ. of Lond. Press, Ltd., 17 Warwick Sq., London, E.C.4 :

*The Calendar*, pubd. in Sept., price 6s. net, postage 1s. *Regns. and Courses for Internal Students* (the "Red Book"), pubd. in Sept., 2s. 6d., postage 1s. The Courses are pubd. separately for the several Faculties, 3d. each net. *Regns. for External Students* (the "Blue Book"), pubd. in Sept., 1s. 6d. net, postage 8d.; *London Univ. Gazette*, pubd. at average intervals of 4 weeks; the Examn. Lists are pubd. in Supplts.; annual subs., including postage, 5s.; single no., 8d. *Matriculation Pamphlet*, issued after each Examn., containing the Regns. and Examn. Papers, 1s. 8d. post free. *Examn. Papers*, published as soon as possible after the several Examns.; prices vary from 1s. 1d. to 3s. 10d. *Libraries of London*: a Guide to Students, by R. A. Rye, Goldsmiths' Librarian, 6d., postage 3d.; 2nd edition, 2s. 6d., postage 6d. *Historical Record of the Univ.*, pubd. in 1912; contains (a) a Hist. of the Univ.; (b) the Univ. Charters, and Acts of Parliament referring to the Univ.; (c) former Fellows; (d) Donations and Trusts; (e) Graduates; (f) persons to whom prizes, etc., have been awarded, and other information of historical interest; 5s. net., postage 6½d.

*Regulations*. The following may be obtained on application to the Univ.: Regns. for Matricn.; Regns. for Int. and for Ext. Students (pubd. separately) for Degrees in Arts, Science, Agric., etc.; for the various Diplomas and Certificates in special subjects; for Ph.D. Degree; Scholarships pamphlet. Applications for any of these should be addressed to the Principal.

*O.T.C. Handbook* obtainable from the Secy., 46 Russell Sq., W.C.1.

*Regns. for Admission of Students from other Univs. as Candidates for Higher Degrees* (except in Med. and Surg.), and *Regns. for Degree of Ph.D.*, obtainable from the Academic Registrar.

## THE YEAR 1921-22

BENEFACTIONS. Treasury grants to Univ., annual £16,000, and special £9400; Inst. of Historical Research, £2000; Galton Lab., £1000; Univ. College, £57,000, and £2000 for Phonetics; King's £38,000, and £2000 for Slavonic studies; K.C.W. Household and Social Science Dept., £6000, and a conditional non-recurrent grant of £7500. Students of late W. H. Hudson, university extension lecturer, £115 for an annual prize; Stansfeld Trustees, £40 for lecture; London County Council, £5000 a year for 3 yrs. towards new buildings at London School of Economics, £12,000 (maintenance grant) for Birkbeck College, and £5000 (conditional) for Engineering Dept. at Univ. College; Drapers' Company, £500 p.a. for 3 yrs., and Lewis Haslam, £1000



(Publication Fund) for Applied Statistics Dept.; friends of late Dr. Burrows, £600 for annual prize; Prof. A. H. Jameson, £50 for Men's Hostel Fund; Sir Ratan Tata's estate, £1400 p.a. for 5 yrs.; Miss J. Wedgwood's estate, stocks producing about £150 p.a. for Brown Animal Sanatory Instn.; Cutlers' Company, five scholarships of £90 for 2 yrs. in commerce; B. Goodman, an atelier hut in connexion with the school of Architecture.

**NEW DEPARTMENTS AND POSTS, ETC.** Unit of Obstetrics and Gynaecology opened by H.M. the Queen at the Royal Free Hospl. Inst. of Historical Research opened by President of the Board of Education. Chairs of Chemistry at St. Thomas's, Surgery at St. Mary's, and of Pathology at Guy's Hospl. Med. Schools; Bacteriology and Bio-Chemistry at Univ. College; Sanskrit at School of Oriental Studies; Central European History at King's College; Readerships in Comparative Slavonic Philology at King's College; Biology at Middx. Hosp. Med. Sch.; staff tutorship for Univ. Extension tutorial classes.

**OTHER NEW DEVELOPMENTS.** Project for establishment in close association with the Univ. of a central hospital medical school for post-graduate work, and an institute of state medicine received substantial encouragement; a system of exchange of lecturers was developed, under which 6 members of the Faculty of Medicine of Paris and 6 lecturers from Dutch Universities delivered lectures in London, and the same number of lecturers from London lectured in Paris and Holland respectively; Appointments Board was amalgamated with Commerce Degree Bureau; a Union Society, on the lines of those of Oxford and Cambridge, came into existence during the year, and is located on a portion of the new Bloomsbury site; the Dept. of Scandinavian studies at Univ. College was placed on a permanent footing; the Univ. co-operated with the Univ. of Columbia in regard to the holding at that Univ. of a conference of Univ. Teachers of English in 1923; a Diploma in Dramatic Art was instituted.

**NUMBER OF INTERNAL STUDENTS** at end of 1921-22, 8886. During 1921 there were admitted to the Univ. 293 graduates of other Univs., including graduates of Calcutta, 29; Camb., 27; Ox., 23; Glas., 21; Wales, 20; Edin., 19; Bom., 18; Panjab, 16; Madras, 12; Durham, 11; Manc., 10; 87 from 32 other Univs.

**SUCCESSFUL CANDIDATES AT DEGREE EXAMNS.** in 1921: 1926, including 545 women. B.A.—Internal, 323, External, 195; B.Sc.—Int., 363, Ext., 205; M.B., B.S., 183; B.Sc. (Engin.), 258, Mining and Met., 15; B.Sc. (Econ.), 58; B.Sc.—Agr., 17, Hortic., 2, Household and Soc. Sc., 4, Vet. Sc., 1; B.Com., 30; LL.B., 38; B.D., 32; B.Mus., 5; M.A., 49; M.Sc., 43; other Masterships, 19; M.D., 39; Ph.D., 17; D.Sc., 16; other Doctorates, 15.

**VISITORS FROM ABROAD WHO LECTURED.** Profs. E. Borel of Geneva, Baldensperger of Strasbourg, H. S. Birkett of McGill, six exchange Profs. from Paris and six from Holland; Prof. E. Claparède of Geneva, Prof. A. F. Pribram of Vienna, Prof. E. Husserl of Freiburg, Dr. Johan Hjørt of Christiania, Dr. Irving Fisher of Yale, Prof. Nils Bohr of Copenhagen, Hon. J. M. Beck, Solicitor-General of U.S.A.

**UNIVERSITY EXTENSION** courses 144, terminal enrolment 12,500. Work started in 6 new centres, and revived in 3. Sessional 24-lecture courses increased slightly; larger percentage of students qualified for certifs. *Tutorial classes*, 36. Summer school on 4 Saturdays with average attendance of 350. *School Examns*: 40 schools added to list, making total 298. General school examn. taken by 9952 candidates. *Holiday Course for Foreigners* attended by 206 students from 19 countries, 50 per cent being from Scandinavia. In 1923 the course will be from July 20 to Aug. 16.

# UNIVERSITY OF LONDON, UNIVERSITY COLLEGE

CHAIRMAN OF THE COLLEGE COMMITTEE—THE VISCOUNT CHELMSFORD,  
G.C.S.I., G.C.M.G., G.C.I.E., G.B.E.

VICE-CHAIRMAN—SIR JOHN ROSE BRADFORD, K.C.M.G., C.B., C.B.E.,  
M.D., F.R.C.P., F.R.S.

TREASURERS—E. DE Q. QUINCEY; F. V. SCHUSTER, B.A.

PROVOST—SIR GREGORY FOSTER, B.A., Ph.D.

SECRETARY—W. W. SETON, M.A., D.Lit., F.S.A.

TUTOR TO WOMEN STUDENTS—WINIFRED SMITH, B.Sc.

LIBRARIAN—L. NEWCOMBE.

Address—Gower St., W.C.1. Telegrams—University College, London.  
Telephone—734 Museum.

Founded in 1826 and opened Oct. 1, 1828, under the name of "The University of London," the College was incorporated as "University College, London," by Royal Charter in 1836. On Jan. 1, 1907, it was incorporated in the University of London. It has 107 Appointed and Recognized Teachers (v. p. 91), and, in all, 46 Profs. and 190 other Teachers.

LIBRARIES. Science, including Fownes and Graham Chemical, Sharpey and Grant Biological, and Geologists' Assocn.'s collections, and the British Assocn.'s periodicals; Arts—Yates Archæol., Edwards (Egypt), Mocatta (Jewish Hist. and Antiq.), Romance Philol. and Lit., Oriental, Philos. and Psych. and other collections, including Barlow Dante, Strong (Oriental), and Leighton (Classics and Philos.) libraries; General College library, including the Whitley Stokes (Celtic), Blackburn and Quain (Law), Field Fine Art, Ricardo Pol. Econ., Graves Math., Joseph Hume's Parliamentary, Carnegie (American History and Institns.), and the Ward (London) collections.

MUSEUMS. Anat., Bot., Chem., Egypt., Engin., Geol. and Mineral., Mat. Med., Math. and Philos. Apparatus, Zool. Two Astron. OBSERVATORIES.

COURSES. Arts, Laws, Science, Engineering, Medical Prelim. and Intermediate, Hygiene. Open to students of both sexes. The Arts Faculty includes Slade School of Fine Art, School of Librarianship, School of Journalism, and Bartlett School of Archit. A *Diploma* in Engin. is given after a 3 yrs.' course, and *Certificates* in Engin. (2 yrs.); a *Diploma* in Archit. (5 yrs.) and a *Certificate* in Archit. (3 yrs.).

All departments of the College are available for POST-GRADUATE AND RESEARCH WORK, and the respective Professors are always prepared to advise such students desirous of undertaking research, whether for higher degrees or otherwise.

FOREIGN STUDENTS are admitted to the College on the same terms as British. They are expected to produce identification papers. In August a *Vacation Course* is held in Phonetics and Spoken English (Director: Prof. Daniel Jones). Men attending that Course can reside at University College Hall, Ealing. Special courses in Aspects of British Life and Civilization take place *throughout the session*. The Secretary will always advise foreign students by correspondence or personal interview as to the cost of residence in London and as to suitable houses. The Ramsay Memorial Fellowships in Chemical Science

founded by certain Foreign Governments are tenable at Univ. Coll., London, among other places; four Fellows from overseas are now working there.

FEES. Composition for 3 sessions' course in Arts—97 to 105 gs.; 5 sessions' course in Archit.—238 gs.; B.Sc.—134 to 140 gs.; Engin.—168 gs.; Econ.—21 gs. per session; Med. for 1st examn.—35, 2nd—80 gs.; Laws—18 gs. per session; Fine Art—28 gs. per session; for Higher Civil Service—50 gs.

SCHOLARSHIPS, ETC. Annual value, £2400.

RESIDENCE. A Hall for 52 men at Ealing, £2 to £3 a week. One for women in Byng Place, W.C.

PUBLICATIONS. *Calendar* (Oct.), 3s. 6d.; *Annual Report*; *Union Society's Magazine*; *Drapers' Co. Research Memoirs and Eugenics Lab. Memoirs*; *Prospectus* of post-graduate courses and arrangements for research.

## THE YEAR 1921-22

PRINCIPAL BENEFACTIONS. London County Council, £5000 towards cost of completion and equipment of Dept. of Engineering; late Lewis Haslam, M.P., £1000 for Dept. of Applied Statistics and Eugenics Publicn. Fund; Carnegie U.K. Trust, £1500 p.a. for School of Librarianship; Committee for Promotion of Scandinavian Studies, £1200 p.a. for Lect'ships in Swedish, Danish, and Norwegian; Drapers' Company, £500 p.a. for Biometric Laboratory; per Italian Ambassador, £300 p.a. for Italian; Chadwick Trustees, £250 for Sanit. Science; for conversion of Lect'ship in History of Art into part-time Prof'ship, £230 : 10s. (including £100 from Sir Otto Beit); Committee of Ramsay Memorial Fund, £210 for annual Gold Medal; Anonymous, £200 p.a. for Lect'ship in Diplom. History, and £50 for necessitous students; Rhodes Trustees, £150 towards Chair of Const. Law; Lord Leverhulme, £50 (Prizes in Town Planning and Archit.); Gladstone Trustees, £10 (Prize for Historical Essay); A. T. Taylor, two ann. Prizes of £5 each (Archit.); Ronald Jones, £10 (Prizes in Archit.); J. Nathan, £10 : 10s. (Prizes in Italian); Anonymous, Prof. Tonks, P. W. Steer, and W. W. Russell, £25, for Prizes in Slade School; Miss Agnes Paul, £3 : 3s. (Prize, Dept. of Greek); for Redecoration of Flaxman Gallery, £79.

SPECIAL EVENTS. Unveiling of Portrait of late Chairman of College Committee (Lord Reay) by late Viscount Bryce, O.M. Visit of H.R.H. Princess Mary and Lord Lascelles on occasion of Inaugural Lecture of Prof. of History of Art.

NEW DEVELOPMENTS. Chair of History of Art (see "Benefactions" above); Readership in Phonetics converted into Prof'ship; Chair of Logic and Scientific Method; Chair of Bio-Chem.; Readership in Plant Chem.; Lect'ship in Utilization of Water-power.

NUMBER OF STUDENTS. Total—2960; Arts, 1121; Science, 370; Med. Sciences, 254; Engin. 166; Laws, 38; Post-grad. and Research, 364; Evening, 461; Vacation, 186.

DEGREES OBTAINED. Bachelors, 158; Masters, 24; Doctors, 14.

RETIREMENTS. Prof. W. P. Ker from Quain Chair of English Lang. and Lit., but retaining Directorship of Dept. of Scandinavian Studies; Dr. F. Aveling, apptd. Reader at King's College; Dr. G. B. Jeffery, apptd. Univ. Prof. at King's College; H. E. Palmer, apptd. Linguistic Adviser to Japanese Ministry of Educn.; J. Shellshear, apptd. Prof., Univ. of Hong-Kong; H. E. Goad, apptd. Director of Brit. Inst. in Florence; J. H. Woodger, apptd. Univ. Reader, Middlesex Hosp. Med. School; G. W. Richardson.

DEATHS. Chairman of College Committee (Lord Reay); the Treasurer, H. Keene; Sir Arthur Charles; Sir Alfred Pearce Gould.

# UNIVERSITY OF LONDON, KING'S COLLEGE AND KING'S COLLEGE FOR WOMEN

CHAIRMAN OF THE DELEGACY—VISCOUNT HAMBLEDEN.

VICE-CHAIRMAN—HON. R. C. PARSONS, M.A.

TREASURER—SIR EDWARD TROUP, K.C.B., K.C.V.O., LL.D.

PRINCIPAL—ERNEST BARKER, M.A., D.Litt. Ox., Hon. LL.D. Edin.

SECRETARY—S. T. SHOVELTON, M.A. Ox.

TUTOR TO WOMEN STUDENTS—HON. ELEANOR M. PLUMER.

LIBRARIAN—F. W. WALTON, M.A.

Address—Strand, W.C.2. Telephone—207 Gerrard.

Founded by Royal Charter in 1829 for "instruction in the various branches of Literature and Science and the doctrines and duties of Christianity," King's College consisted at first of a School and Departments of General Literature, Science, and Medicine, to which were added successively Engineering, Theological, and Oriental Depts. The Hospital was built in 1839; the Evening Classes were started in 1856, and a Women's Dept. in 1881. In 1910 the College School became a separate Corporation, the Hospl. and Advanced Med. School were made independent, the other Depts. (except the Theological) doing work of University standard were incorporated in the Univ. of London, while the Council remained the governing body of the Theol. Dept., which became a School of the Univ. In 1915 the Arts and Science Departments of King's College for Women, previously housed in South Kensington, were transferred to the buildings of King's College, and the Household and Social Science Department to new buildings on Campden Hill. King's College has 94 Appointed and Recognized Teachers, King's Coll. for Women, Household and Social Sc. Dept., has 9 (v. p. 91).

LIBRARY, 50,000 vols., including the Marsden (Philol. and Oriental), Skeat and Furnivall (English), Wheatstone (Electricity, etc.), Slavonic, and Byzantine and Modern Greek collections.

LABORATORIES AND MUSEUMS. Anat. (Hughes Collection), Comp. Anat., Bact., Biol., Bot., Chem., Engin., Geol. and Mineral., Mat. Med., Metall., Pharmacol., Phys. (George III. Museum), Physiol., Psych., Pub. Health, Zool.

DEGREE COURSES in Arts, Science, Laws, Engineering. Prelim. and Interm. courses in Medicine and Pub. Health. Day Training College (men only) under the Board of Education. Dept. for training secondary Teachers (men and women).

*College Diploma* course in Engineering, ordinarily 3 yrs. The *Associateship*, open to men and women graduates who have attended a prescribed course in Divinity. *Certificates* in Palæography, Spanish, Portuguese, and Russian.

THE HOUSEHOLD AND SOCIAL SCIENCE DEPARTMENT (Dean—Miss J. Lane-Clayton, M.D., D.Sc., J.P.) at Campden Hill Road, W.8, continues to be a Department of King's College for Women, though in the main practically separate. It provides full degree courses for the B.Sc. in H. and S. Sc. Tuition

Fees, 45 gs. per session. Residence in Q. Mary's Hostel, 93 gs.; in annexe, 70 gs. Number of students in 1922, 191.

**ADVANCED STUDY.** Special facilities in English (including Bibliography), History (especially Mediæval, Colonial, Naval, Eastern Europe, and Ancient), Slavonic, Spanish, Portuguese, Modern Greek, Bacteriology and Pub. Health, and several other Depts. of Science.

**FEES.** Entrance, £6; Tuition per Session: Arts, 30 gs.; Science, 42 gs.; Med., 35 gs.; Laws, 18 gs.; Engin., 54 gs. Entrance fee includes fees for games, library, union society and locker.

**SCHOLARSHIPS FOR GRADUATES.** In English 3, aggregate value £145; Science 5, ag. value £73; Med. 3, ag. value £60; Engin. 2, ag. value £100.

**RESIDENCE.** Two hostels for men (one Theol.), and one for (60) women; also Q. Mary's Hostel and Annexe in the Household and Social Sc. Dept. buildings at Campden Hill with accommodation for 130.

**PUBLICATIONS.** *Calendar*, 4s. 6d. post free.

## THE YEAR 1921-22

**DEVELOPMENT OF STUDIES.** Lect'ship in Hellenistic History and Lit.; new rank of Assistant for conversation in Mod. Langs.; scope of Dept. of Spanish widened to include history and general culture.

**OTHER NEW DEVELOPMENTS.** Women's hostel extended; provision of hostel for men taken in hand.

**NUMBER OF STUDENTS.** Full-time preparing for first degree in Arts, 264; Nat. Sc., 240; Med., 176; Engin., 184; Theol., 38; preparing for Diploma in Arts, 71; Conjoint Board's Exams. in Med., 143; College Diploma in Engin., 15; Assoc'ship of College in Theol., 119. Total full-time, 1250. Evening, 254 (excluding Theol. students) taking course for degrees in Arts, Sc., and Laws. Preparing for higher degrees: full-time, 57; part-time, 73; 290 other research and post-grad. or post-diploma courses. Part-time preparing for first diploma, 318; occasional, 934. Women students included in above figures: full-time in Arts, 173; Sc., 53; Med., 120; part-time day students, 228, evening, 324. Public Lectures were attended by 15,400 persons.

**DEGREES OBTAINED, 244.**

**RESIGNATIONS.** Prof. G. Young; Miss Hilda Johnstone, on apptmt. as Prof. at Royal Holloway Coll.; Miss E. Philip Smith; F. Chudoba, on apptmt. as Prof. at Brünn; R. Smith; Miss E. M. Rees, on apptmt. as Asst. Lectr. at Swansea; R. A. Jones was granted leave for 2 years to undertake temporary work in the École Normale, Paris.

## INCORPORATED INSTITUTIONS AND UNIVERSITY DEPARTMENTS

GOLDSMITHS' COLLEGE, v. p: 143.

THE BROWN ANIMAL SANATORY INSTITUTION, 149 Wandsworth Rd., Vauxhall, S.W.8. Supt.—F. W. Twort, M.R.C.S., L.R.C.P. Established in 1871 for “investigating, studying, and, without charge beyond immediate expenses, endeavouring to cure maladies, distempers, and injuries, any quadrupeds or birds useful to man may be found subject to.” It contains a Hospital, in which the diseases and injuries of animals are treated, and a Laboratory, where the investigation and study of diseases of animals are carried on. Both In and Out Patients are treated. Clin. students may be admitted to the Vet. Depts., and Research students are received in the Lab.

THE PHYSIOLOGICAL LABORATORY (Director—W. L. Symes, M.R.C.S., acting) in the University Building, established in 1902, comprises a lecture-room, a workshop, a library, and rooms assigned to the Depts. of Physiol. Chem., Chem. Path. and Pharmacol., Electrophysiol., Genl. Exper. Physiol., and Exper. Psych. Courses of lectures on current research are given to Univ. students by lectrs. of the Univ. and others, and a limited number of duly qualified students are admitted as workers.

THE FRANCIS GALTON LABORATORY FOR NATIONAL EUGENICS (WITH WHICH IS ASSOCIATED THE DRAPERS' COMPANY'S BIOMETRIC LABORATORY). Director—Karl Pearson, M.A., LL.D., F.R.S., Galton Professor. These two form together a Department of Applied Statistics (housed at University College) adapted to the needs of post-graduate workers and of students training for special investigations.

The Francis Galton Laboratory was founded in 1904 for the study of those agencies under social control that may improve or impair the racial qualities of future generations, either physically or mentally. Open to Research students in Eugenics of both sexes.

The Biometric Laboratory, founded 1895, for the statistical study of biological problems, possesses a good collection of calculating machines, integrating mechanisms, moment-finders, as well as a large series of statistical models, etc. Research workers can start any time during the session, but, unless attending the lectures in the Dept., are expected to have a preliminary training either in Biol. or Maths.

Courses of Instruction are given on Statistics and cognate subjects, and also short courses of popular lectures. Fees (for Research workers): per Term, £5. A Fee of 17 gs. per session admits to the Eugenic and Biometric Labs. on all days and to all lectures, as well as to the use of the Library and of the material in the Archives. Fee for use of calculating machines 1½ gs. per term.

*Publications.* *Eugenics Lab. Memoirs* (i.-xx.) and *Lecture Series* (i.-xiii., popular exposition of conclusions); *Treasury of Human Inheritance* (9 parts). *Biometrika Journal* (i.-xiii.); Drapers' Company Research Memoirs, *Biometric Series* (i.-xi.), and *Studies in Natural Deterioration* (i.-ix.); Drapers' Company *Technical Series* (i.-vii.); *Tracts for Computers* (i.-vii.). Ephemeral papers published in *Questions of the Day and the Fray* (i.-x.).

BARTLETT SCHOOL OF ARCHITECTURE (Prof. A. E. Richardson, F.R.I.B.A., assisted by Arthur Stratton, F.R.I.B.A., and staff of Lectrs. and Studio Instrs.) was established by the combination of the Archit. Schools of University and King's Colleges. The Certificate (3 yrs.) and Diploma (5 yrs.) courses are recognized by the R.I.B.A. as exempting from the R.I.B.A. Intermediate and Final exams. respectively. The accommodation includes three large Studios, a Museum, a Cast Gallery, a Library, a Lecture Theatre, and a Class Room. Rooms are also provided for the Department of Town-Planning instituted in Oct. 1914. The day-school is supplemented by evening classes in design and an Atelier for graduates and advanced students.

THE COMMERCE DEGREE BUREAU was instituted in 1920 to help External and Part-time students proposing to take the Commerce Degree exams., to assist in the employment of Commerce Degree students and graduates at home and abroad, to provide a reference and lending library, and generally promote the value and usefulness of the Commerce degree. Offices have been opened under a Board of Governors at 46 Russell Square, W.C.1, where the work of the Bureau is associated with the general UNIVERSITY APPOINTMENTS BOARD work. There is an Educational Advisory Staff (Chief Advisor: Prof. A. J. Sargent, M.A.). Prospectus for Session 1922-23 obtainable on application to the Secretary, H. J. Crawford, B.A.

THE INSTITUTE OF HISTORICAL RESEARCH, Malet St., W.C.1, is the University Laboratory of History, devoted exclusively to post-graduate and research work. It is situated close to the British Museum, and consists of a systematically planned series of seminar libraries, provided with the books containing or describing the main sources of mediæval and modern history (especially those whose manuscript originals are in the Record Office and other London Archives). It is open not only to every professor, reader, or other teacher of history in the Univ., and his research students, but to historians, archivists, and teachers and research students from other Univs., approved by the Committee. *Chairman of Committee*, A. F. Pollard, M.A., Litt.D., F.B.A., Prof. of Engl. Hist.; *Hon. Librarian*, Miss E. Jeffries Davis, M.A., Reader in the Hist. and Records of London; *Secretary*, Miss I. F. Narracott, M.B.E.

# SCHOOLS OF THE UNIVERSITY

## IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY

VISITOR—H.M. THE KING.

CHAIRMAN OF THE GOVERNING BODY—The Most Hon. the MARQUESS  
OF CREWE, K.G., P.C., M.A., LL.D.

RECTOR—Sir THOMAS HOLLAND, K.C.S.I., K.C.I.E., D.Sc., LL.D.,  
F.R.S.

SECRETARY—A. GOW, M.A., B.Sc.

REGISTRAR—JOHN JONES.

Address—Imperial Institute Rd., S. Kensington, S.W.7.

Telegrams—Scientist, Southkens, London. Telephone—6444 Kensington.

Founded by Royal Charter in 1907 for the purpose of giving the highest specialized instruction and providing the fullest equipment for the most advanced training and research in various branches of Science, especially in its application to Industry, the Imperial College includes as integral parts the following Associated Colleges :

The Royal College of Science.

The Royal School of Mines.

The City and Guilds (Engineering) College.

The total staff exceeds 200. The College is a School of the University in Science and Engineering, having about 60 Appointed and Recognized Teachers (v. p. 91). The buildings occupy about 8 acres and cost with equipment over £1,000,000.

**LIBRARIES, ETC.** The Library of the Science Museum is available for the use of Students, and each Dept. is provided with a special Library, **RESEARCH LABORATORIES**, and full facilities for advanced study.

**DEPARTMENTS.** The work is organized in 27 main and sub Depts. with the following Professors—Aeronautics : Sir Richard Glazebrook (Aviation), Sir Napier Shaw (Meteorology), L. Bairstow (Aerodynamics). Biology : J. B. Farmer (Botany), E. W. MacBride (Zoology), V. H. Blackman (Plant Physiology and Pathology), H. M. Lefroy (Entom.), P. Groom (Tech. of Woods and Fibres), S. B. Schryver (Biochem.). Chemical Technology : W. A. Bone, J. W. Hinchley (Asst. Prof. of Chem. Engineering). Chemistry : H. Brereton Baker, J. F. Thorpe (Organic C.), J. C. Philip (Physical C.). Engineering, Civil, and Surveying : S. M. Dixon. Electrical Engineering : C. L. Fortescue. Engineering, Mech., and Motive Power (including Aeronautical) E. : W. E. Dalby. Geology, Mining Geology, and Oil Technology : W. W. Watts, C. G. Cullis (Economic Mineralogy), A. M. Davies (Asst. Prof. of Palæontology), V. C. Illing (Asst. Prof. in Petroleum). Maths. and Mechanics : A. R. Forsyth, A. N. Whitehead (Applied M.). Metallurgy : H. C. H. Carpenter. Mining :



S. J. Truscott, L. H. Cooke (Mine Surveying). Optical Engineering and Applied Optics : F. J. Cheshire, A. E. Conrady (O. Design), A. F. C. Pollard [O. Engineering (Mech.) and Instrument Design]. Physics : H. L. Callendar, A. O. Rankine, A. Fowler (Astrophysics).

**ADMISSION.** The conditions of admission are as under, but the College reserves power to admit in special cases candidates whose qualifications do not in every respect coincide with those prescribed, but whose previous training fits them to take full advantage of the course proposed ; the prescribed qualifications give no right to admission, but will be considered with others of which the candidate may give evidence. (i.) *R.C.S. and R.S.M.* A candidate for admission must be as a rule not less than 17 yrs. of age. For admission to 1st yr. Assoc. courses an Entrance examn. in Maths. and Mechanics, Chem. Physics, Engl., French or German or Spanish or Italian, and Geometrical or Freehand Drawing must be passed, unless equivalent examns. have been passed elsewhere. (The Matricn. examn. of the Univ. is considered equivalent provided the student has passed in "More Advanced Maths." and "Elem. Mechanics," and in the other subjects prescribed for the Entrance examn.) Candidates for admission to a 2nd yr. must pass the more advanced College Entrance examn. in Maths., Mechanics, Chem., and Physics, unless equivalent examns. have been passed elsewhere. For admission to a 3rd yr. candidates must have reached a standard correspondingly higher. (ii.) *City and Guilds.* A candidate desiring to enter for the 1st yr. of the Assoc'ship course must be at least 16 yrs. of age and must pass a special Entrance examn. in Maths. and Mechanics, Mech. Drawing, Phys., Chem., Engl., and French or German or Italian or Spanish, unless he has passed the Matricn. examn. of the Univ., taking certain specified subjects, including More Advanced Maths. For admission to the 2nd yr. course candidates must take the more advanced papers and the practical tests in the College examn., or they must have passed the Intern. B.Sc. (Eng.) in the Univ. in Maths., Pure and Applied, Heat, Electricity and Magnetism, Engineering, Drawing and Design, and Chemistry. Candidates for admission to advanced or research work in the *R.C.S.*, *R.S.M.*, or *C. and G.* are admitted on satisfying the Coll. authorities as to their previous training.

**DIPLOMA AND OTHER COURSES.** Associateship of each of the 3 associated Colls., 3 or 4 yrs. ; specially arranged courses in Advanced Science or Technology, 1 or more yrs., leading to the Diploma of the Imperial Coll. ; short courses dealing with special subjects for graduates or persons engaged in scientific industrial pursuits ; occasional courses to suit individual needs.

**FEES.** Entrance, £2 ; Tuition, per session, for full-time Associateship or Post-Associateship courses of study, £62 : 10s. (including Union fees) ; for less than full-time courses, *pro rata* ; for Research Work the fee is specially determined in each case between the limits £5 : 10s. and £22 : 10s. per session (including Union fees).

**SCHOLARSHIPS.** Entrance—18 of £62 : 10s. each (6 for each of the Assoc. Colls.) ; Royal, awarded by Board of Educn., £60 each and fees (v. Regns., obtainable from H.M. Stationery Office, Kingsway, 1d.) ; Beit Fellowship for Research, £250 (for men and women graduates below the age of 25, Europeans only) ; £300, R.S.M., Frecheville Research Fellowships ; £300 Plimmer Fellowship in Pathology ; £100 in Botany ; and many others (v. *Calendar*). Under a scheme established in 1920, 6 scholarships of £300 each (in special cases £400) may be awarded for 1 yr. for courses of post-graduate study in American Univs. or Works.

**AFFILIATION, ETC.** The Univ. of Sheffield is associated with the Coll. for Advanced Studies in the Metallurgy of Iron and Steel. Students of Huddersfield Technical Coll. may be admitted, subject to certain conditions, without examn.

**PUBLICATIONS.** *Calendar*, 1s.; *Annual Report*, with list of memoirs pubd. by members of the Coll.

## THE YEAR 1921-22

**BENEFACTIONS.** Sir Alfred Yarrow, £1600 for post-grad. scholps. at American Instns.; G. Whiffen, £1000 (additional to £8000 donated last year) towards equipment of the Intermediate Scale Chem. Laboratory; several others in extension of equipment.

**OTHER DEVELOPMENTS.** Extension of special investigations by Research workers not graded as students; 28 were engaged on problems relating to food storage, silk, adhesives, investigation of metals, etc.; establishment of a Loan Fund for assistance of needy students; discontinuance of the colour vision Lab. as a place for Board of Trade sight tests, and its absorption in the Technical Optics Dept. of the College.

**DIPLOMAS GRANTED.** A.R.C.S., 82 (including 61 in Chemistry); A.R.S.M., 39 (mining, 16; metall., 17; Oil Tech., 4; Mining Geol., 2); A.C.G.I., 118; D.I.C., 81. Women included in above, A.R.C.S., 2; D.I.C., 3.

**STUDENTS.** Preparing for the College Diplomas, 888, including 14 women (Chem., 176; Engin., 435; Mining, 89; Metall., 50; Biol., 32; Physics, 27; Mining Geol., 18; Oil Tech., 33; Opt. Engin., 10); post-diploma and research, 295, including 36 women (Biol., 75; Chem., 56; Chem. Tech., 23; aeronautics, 57); occasionals, 62. Also 28 Research workers. Full-time students from abroad, 91: India, 28; S. Africa, 11; other parts of the Empire, 24; Russia, 14; Roumania, 5; Japan, 1; other Foreign countries, 7.

## EAST LONDON COLLEGE

Address—Mile End Rd., E.1. Telephone—3384 East.

Principal—J. L. S. Hatton, M.A. Secretary—E. J. Wignall.

Established 1892. Governed by a Council which includes the Master and Clerk of the Drapers' Co., and representatives of the L.C.C., the Univ., and the Staff. A School of the Univ. in Arts, Science, and Engin. Appointed and Recognized Teachers—33 (v. p. 91), in Aviation, Bot., Chem., Class., Engin., English, French, Geog., Geol., German, Hist., Maths., Physics, Spanish, Zool. Special Research LABORATORIES in Physics, Chem., Elec. Engin. Degree courses in Arts, Science, Engin. (including Aeronautical Engin.), and Med. Fees, inclusive, 20 gs. p.a. Hostel for women. *Calendar*, 1s. post free.

NUMBER OF STUDENTS (Full-time, Day), 550.

## BIRKBECK COLLEGE

Address—Bream's Buildings, E.C.4. Telephone—2245 Holborn.

Principal—G. Senter, D.Sc., Ph.D., F.I.C.

Secretary—G. F. Troup Horne, B.A.

Founded 1823. A School of the Univ. in Arts and Science for evening and part-time students for 5 yrs. from Oct. 1920. Recognized Teachers—31 (v. p. 91), in Chem., Physics, Bot., Zool., Geol., Maths., Classics, French, Engl., German, Ital., Hist., Geog., Philos., Economics. Courses for degrees in Arts and Science and for the Academic Diploma in Geog. *Fees* (including College societies) per session (evening classes): in Arts, £7: 10s.; Science, £9. Registrn. fee for post-grad. work, 2 gs. *Studentships*, 27, conferring remission of evening tuition fees, are awarded annually. *Number of Students* (Day and Evening), 1061. *Publications*: *Calendar*, 1s.; *Annual Report*; *Lodestone* (Students' Mag.).

## LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Address—Houghton St., Aldwych, W.C.2.

Telegrams—"Poleconics, Estrand." Telephone 5671 Holborn.

Director—Sir Wm. H. Beveridge, K.C.B., M.A., B.C.L.

Secretary—Mrs. Mair, O.B.E., M.A.

Founded 1895. A School of the Univ. recognized in the Faculties of Economics and Political Science (including Commerce and Industry), of Laws and of Arts (in Geog. and Sociology). Appointed and Recognized Teachers (v. p. 91)—36, in Acctcy., Banking, Comm., Econ., Ethnol., Geog., Hist., Law, Philos., Pol. Sc., Pub. Admn., Sociol., Stats., Transport; others—20.

Matriculated students are registered as Internal students of the Univ. with

a view to the B.Sc. Econ., B.Com., LL.B., and B.A. with Honours in Geog., Sociology, or Anthropol., or the Pass degree with Geog., or to Higher degrees.

The lectures and classes at the School are open also to those who have not matriculated and do not wish to pursue a full University course—in particular to those engaged in banking, accounting, railway and other transport, commerce and industry, to civil servants and municipal officials, to teachers, and to those engaged in or qualifying for social work. To all these the School affords, by day or evening, the opportunity of specialized or advanced study on particular topics. Dunford House, a country mansion near Midhurst in Sussex, is available for holidays, private study, and vacation courses, and for conferences.

The School offers special facilities for post-graduate research, under the supervision of professors or otherwise, and the British Library of Political Science, which is maintained by the School, is open not only to those who are taking courses at the School, but, by permission of the Director, to any person desiring to utilize it for research or consultation. The Fry Library of International Law is housed at the School. The Ratan Tata Foundation for research into social conditions is administered by the School, which maintains in connexion with it a Dept. of Social Science and Administration.

General Composition Fee for the session, 21 gs.

A Research Studentship, £175, in addition to fees, will be awarded in July 1923.

Publications: *Studies in Econ. and Pol. Sc.*; *Economica*, thrice annually, 2s. 6d. (T. Fisher Unwin, Ltd.).

NUMBER OF STUDENTS (1921-22). Regular, 885; Occasional, 1520. Of Regular Students 550 (175 women) were Day and 335 (40 women) Evening Students; 326 (69 women) preparing for the B.Sc.Econ., 263 (11 women) for the B.Com., 8 for the LL.B., 25 for the M.Sc., 27 for the Ph.D., 12 for other Doctorates, 15 for Geog. Dipl. and Certif., 25 for Comm. Certif., 10 for Journalism Dipl., 86 (82 women) for Soc. Sc. Dipl. and Certif. (Ratan Tata Dept.), 4 for Consular Service. The Occasional Students included 557 Railway Students, 77 L.C.C. Teachers, and 73 Journalists.

## SOUTH-EASTERN AGRICULTURAL COLLEGE, WYE

Address—Wye, Kent. Telephone—1 Wye.

Principal—R. M. Wilson, B.Sc. Secy.—C. Fergusson.

Founded 1894. A School of the Univ. in Science (Agric.). Recognized Teachers—4 (v. p. 91), in Agr., Bot., Geol., Vet. Sc.

LIBRARY, 3500 vols. LABORATORIES: Chem. Research, Biol. (35 places), Bact., Entom., Vet. Farm, 460 acres. Forestry demonstration plantation. Fruit research station.

Courses provided for B.Sc.—3 yrs., Diploma—3 yrs., Certif., or Horticulture —2 yrs. Training for practical farming, for teaching, and for scientific advisory work. Instruction in Agric., Dairying, Vet. Sc., Forestry, Hops, Hortic., Iron- and Wood-work, Poultry, and Bee-keeping. Extension Lectures, summer courses for Elem. School Teachers, short courses for farmers' sons. FEES, inclusive for board, lodging, and tuition: British Subjects, £150 p.a.; others, £180 p.a. Tuition only—British subjects, £85; others, £115 p.a. Reduced fees for ratepayers of Kent and Surrey. Number of Students, 150.

## LONDON DAY TRAINING COLLEGE

Address—Southampton Row, W.C.1.

Principal—Prof. T. Percy Nunn, M.A., D.Sc. Secy.—Miss G. M. Wacey.

Founded 1902. The Chancellor and Vice-Chancellor of the Univ. and Chairmen of the L.C.C. and London Educn. Committee are *ex-officio* members of the College Council. A School of the Univ. in Pedagogy. Appointed and Recog. Teachers, 5 (v. p. 95), in Educn.; others, 5.

Schools under the L.C.C. and others are used for practical instruction, and 3 Demonstration Schools are attached to the Coll.

Students are trained under the Regulations for the Training of Teachers (H.M. Stationery Office, Kingsway, W.C.2) for Elem. and Secondary Schools. Undergraduates can take a 4 yrs.' course so as to combine B.A., B.Sc., or B.Sc.Econ. courses (taken at other Colls.) with Professional training. One who has already graduated may devote himself continuously for a year to Theory, etc., of Educn. and obtain the Univ. diploma. *Fees*: London students—*nil*; others—for a year spent entirely at the Coll. for a professional course, £40. *Scholarships*: Free place in 4 yrs.' and 1 yr. courses. London students eligible for senior L.C.C. Scholps. The *Londinian Review* is published by an old students' assocn.

NUMBER OF STUDENTS (1922-23): Internal, graduates preparing for the diploma—200, including 105 women; for M.A., 27 (7 women); total, 793 (458 women).

## SCHOOL OF ORIENTAL STUDIES

Address—Finsbury Circus, E.C.2.

Director—Prof. Sir E. Denison Ross, C.I.E., Ph.D.

Secy.—Miss C. L. Clegg.

Established by Royal Charter, 1916. A School of the Univ. in Arts. Appointed and Recog. Teachers—22 (v. pp. 97, 112); others, 13. *Library*, 100,000 vols. *Fees*: 4 to 20 gs. per session; I.C.S. probationers, 30 gs. *Scholarships* (Gilchrist), 2 of £50 in Turkish and Chinese. Teaching provided in more than 45 languages and in the history, religions, and customs of Oriental and African countries. Special facilities for research work.

NUMBER OF STUDENTS: 458.

## WOMEN'S COLLEGES

(See also p. 126.)

### BEDFORD COLLEGE FOR WOMEN

Address—Inner Circle, Regent's Park, N.W.1.  
Telephone—Langham 1420.

Principal—Miss Tuke, M.A. Secy.—Miss Olive E. Monkhouse, M.B.E., B.A.

Founded 1849. A School of the Univ. in Arts and Science. Appointed and Recognized Teachers—37 (v. p. 91), in Bot., Chem., Classics, Dutch, English, French, Geog., Geol., German, Hist., Hyg., Ital., Maths., Philos., Physics, Physiol., Psych., Zool. Tate LIBRARY and Wernher Reading-Room contain 30,000 volumes. Special facilities for Research work in the LABORATORIES (Bact., Bot., Chem., Geol., Physics, Physiol., Psych., and Zool.).

Minimum age for admission, 17. Students are prepared for all examns. of the Univ. of London in Arts and Science. In Medicine the College is recognized by the Univ. for purposes of the First M.B., and in Chem. and Physiol. for the Second M.B. Examn.

RESIDENTIAL accommodation for 93 students in the Coll. and 80 at hostels. FEES (Inclusive Sessional), for tuition: Interm. Arts—42 gs.; B.A. Pass and Honours—£40; Interm. Science, First M.B. and B.Sc. Pass—£56. *Average Inclusive Fees—College and Residence*: Interm. Arts—£144; B.A.—£139; First M.B., Interm. Sc., or B.Sc.—£156; M.A.—£116.

SCHOLARSHIPS for graduates: One in Sociology, £80 p.a. for 2 yrs.; one for research in Arts or Science, £125; "F.M.W." medical, £50. Awarded biennially. PUBLICATIONS: *Calendar*, post free, 2s. 4d. Number of Students, 560.

### ROYAL HOLLOWAY COLLEGE FOR WOMEN

Address—Englefield Green, Surrey. Telephone—114 Egham.  
Principal—Miss E. C. Higgins, B.A. Secy.—Miss U. R. Dolling.

Opened in 1886. 19 miles from London. A School of the Univ. in Arts and Science. Appointed and Recog. Teachers—19 (v. p. 91), in Chem., Class., Engl., French, German, Hist., Maths., Physics, Zool. LIBRARY, 15,000 vols. LABORATORIES: Bot., Chem., Physics. Botanic Gardens—area of grounds, 95 acres. Residential accommodation for 200.

Courses provided for Bachelorship and Higher degrees in Arts and Science. Inclusive FEES: £135 a yr. Post-graduate studentships, 3 or 4 of £40 each, open to students of the Coll. only. PUBLICATIONS: *Calendar*, 2s. post free.

NUMBER OF STUDENTS (1922). Full-time, preparing for Bachelorship—193; for Higher degrees—1.

## WESTFIELD COLLEGE, HAMPSTEAD

Address—Kidderpore Avenue, Finchley Rd., N.W.3.  
Telephone—734 Hampstead.

Principal—Eleanor C. Lodge, M.A. Ox.  
Secy.—Miss E. C. Gedge, B.A.

Founded in 1882 by Miss Dudin Brown for the higher education of women. The college is undenominational, but the Principal is required to be a member of the Church of England. Situated near the south-west corner of Hampstead Heath; has residential accommodation for 87 students.

A School of the University in Arts. Appointed and Recognized Teachers (v. p. 91)—13, in Bot., Class., Engl., Fr., Hist., Maths.; 3 other Lectrs.

Students are not admitted under the age of 18, and are required to pass an Entrance examn. Approved courses (Hons. and Pass) in the Faculty of Science in Bot. and Maths. are provided, as well as in Arts. Research Studentships are from time to time offered to graduates of this Univ. and of other Univs. Two rooms are set aside for Botanical Research. *Fees*: For tuition from 38 to 53 gs., residence £90 per session. *Number of Students*, 1921-22: 114. Full-time, preparing for B.A., 85; B.Sc., 18; graduate students, 5.

## THEOLOGICAL SCHOOLS OF THE UNIVERSITY

NEW COLLEGE, HAMPSTEAD (Congregational), Finchley Road, N.W.3. Principal—A. E. Garvie, M.A., D.D. Secy.—Rev. H. Staines, M.A., B.D.

Founded 1696, reconstituted 1850. Recognized Teachers (v. p. 91), including Principal—5, in Classics and Theol. *Library*, 30,000 vols. *Fees* for B.D. course for non-ministerial students: 30 gs. p.a. *Number of Students*: 27.

HACKNEY COLLEGE (Congregational), Finchley Rd., N.W.3. Telephone —3719 Hampstead. Principal—A. E. Garvie, M.A., D.D. Secy.—T. R. Grantham, Dorking.

Founded 1803. Recognized Teachers (v. p. 91)—5, in Classics and Theol. In its educational work, the College co-operates with New and Regent's Park Colleges. *Fees*: 6 gs. p.a. for each Univ. class. *Number of Students*: 22.

REGENT'S PARK COLLEGE (Baptist), Regent's Park, N.W.8. Principal—Rev. H. W. Robinson, M.A. Secy.—Rev. C. M. Hardy, B.A.

Founded 1810. Recognized Teachers (v. p. 91)—3, in Classics and Theol. Students for an Arts degree attend classes at Univ. Coll. *Fees*: 2½ gs. each class per term. *Number of Students*: 25. See also under Hackney Coll.

KING'S COLLEGE, THEOLOGICAL DEPARTMENT (Church of England), Strand, W.C.2. Telephone—207 and 208 Gerrard. Dean—W. R. Matthews, M.A., D.D. Secy.—S. T. Shovelton, M.A.

Founded 1829 (v. *supra*, King's College). Recognized Teachers (v. p. 101)—8. Complete courses for all Theol. degrees. Day and Evg. Classes. *Fees*: for tuition, undergraduate courses, £30 per session; entrance, £6; full post-graduate course, 12 gs.; Ph.D., 21 gs. *Hostel* for students: fee for residence, £22 per term. *Number of Students* (1921-22): Full-time, 180; others, 40.

WESLEYAN COLLEGE, RICHMOND, Surrey. Principal—W. T. A. Barber, M.A., D.D. Secy. of Committee—Rev. R. W. Harding, B.D.

Opened 1843. Recognized Teachers (v. p. 91)—3, in Theol. All students are accepted candidates for Ministry of Wesleyan Methodist Church. Residential accommodation for 60. *Number of Students*: 52.

ST. JOHN'S HALL, Highbury, London, N.5 (Church of England). Principal—A. W. Greenup, M.A., D.D., Litt.D. Hon. Secy. of Council—Rev. T. J. Pulvertaft, M.A.

Founded and endowed 1863 by A. Peache, of the Western Univ. of Canada. Recognized Teachers (v. p. 91)—3 (Semitics and Theol.); others—3. Courses for L.Th. Durham as well as for B.D. of London. *Fees*: Entrance, 2 gs.; board and tuition, £90. Residential accommodation for 51 students. *Number of Students* (1921-22): Preparing for B.D.—4; D.D. and Litt.D.—2; others—51.



## MEDICAL SCHOOLS OF THE UNIVERSITY

ROYAL ARMY MEDICAL COLLEGE, Grosvenor Rd., S.W.1. Commandant—Col. C. B. Martin, C.M.G.

Opened 1902; under Army Med. Advisory Board; open only to fully qualified medical men commissioned in or probationers for the R.A.M.C. or I.M.S. Profs. of Path. and Bact., Hygiene, Trop. Med., and Military Surgery. Special teaching in Physical Training and at Mily. Hospl. (81 beds), Syphilology. Qu. Alexandra Mily. Hospl. (234 beds) forms part of the Coll. Students (average, about 70) are probationers and Captains, R.A.M.C., taking 7 mos.' course for promotion. *Residential accommodation for 70.*

ST. BARTHOLOMEW'S HOSPITAL, West Smithfield, E.C.1. Dean—T. W. Shore, O.B.E., M.D., B.Sc. Sub-Dean—W. Girling Ball, F.R.C.S.

Founded 1662. Appointed and Recognized Teachers—47 (v. p. 91); *Library*: the largest of the kind in London. *Museum*: 9400 specimens, 2000 casts and drawings. *Laboratories*, with facilities for research in Path., Pharmacol., etc. 757 beds. *Fees*: 220 gs. for whole curriculum; from 1st M.B., 190 gs. *Scholarships*: total annual value over £1000; two for Research in Path. (£115) and Surg. (£105) open to graduates of any Univ. educated at Bart's. Fellowship £600, open to graduates of any Univ. for research in Lymphadenoma. *Residential College* within Hospl. grounds for 26 students (Warden, R. M. Vick, O.B.E., M.Ch., F.R.C.S.). Large Athletic Grounds. Students' Union, including Athletic Clubs and Abernethian Soc. *Publications*: *Hospital Reports*, annually, and *Journal* (Students'), monthly. *Number of Internal Students*: 365 (men).

CHARING CROSS HOSPITAL, Charing Cross, W.C.2. Dean—W. J. Fenton, M.D., F.R.C.P. Founded 1821. Appointed and Recognized Teachers (v. p. 91)—14. *Fees*: entrance, 10 gs.; annual, 35 gs. Several scholarships, etc. Women students are admitted. *Number of Students*: 190.

ROYAL DENTAL HOSPITAL AND LONDON SCHOOL OF DENTAL SURGERY, 32 Leicester Sq., W.C.2. Dean—H. Stobie, L.R.C.P., M.R.C.S., L.D.S. Secy.—W. J. Wadham.

Founded 1858. Open to both sexes. Recognized Teachers—3 (v. *supra*, p. 94); others—30. Library, Museum, and Laboratories. X-Ray Dept. *Fees*: £70 for 2 yrs.' Hospl. practice and Lectures, or, including 2 yrs.' Dent. Mechanics, £200. *Number of Students* (1922): 347.

GUY'S HOSPITAL, St. Thomas's St., Borough, S.E.1. Dean—Prof. T. B. Johnston, M.B., Ch.B. Clerk to the Dean—S. H. Croucher.

Founded in connexion with St. Thomas's, 1769; as a separate School, 1826. Appointed and Recognized Teachers—43 (v. p. 91). Library, 10,000 vols. Museum, 5000 specimens and 2000 drawings. 613 beds. Fully equipped Dental Dept. with Lab. *Fees*: entrance, £28; annual, £49. Foundations in aid of Research: Lect'ship in Path., approx. £1250 p.a.; in Clin. Chem., £190; Trav. Studentship, £100; Studentship in Mat. Med., £40; in Path., £250; Dem'rship in Clin. Chem., £150; in Path., £320; Med. Research Fellowship, etc. Numerous prizes and entrance scholps. Resident

*appointments*—58 annually. *Residential* accommodation for 60 students. *Furnished rooms*, 15s. to 34s. *Number of Students*: about 850 (men).

KING'S COLLEGE HOSPITAL, Denmark Hill, S.E.5. Dean—H. Willoughby Lyle, M.D., B.S., F.R.C.S. Secy.—S. C. Ranner, M.A. Women students are admitted.

Appointed and Recognized Teachers—27 (v. p. 91); others—18. *Fees*: entrance, 10 gs.; complete courses for Med. Degree and Diploma exams., 190 gs.; final course only, 93 gs. *Scholarships*: 2 of £80 for Ox. and Camb. students; 2 of £50 at entrance (one Arts, one Science) and 2 of £50 for students who have passed in Biol., Chem., and Physics and propose to graduate in any British Univ. *Hostel* with accommodation for 30 men students. *Students' Publication*: K.C.H. Gazette. *Undergraduate Students*: 264.

LONDON HOSPITAL, Turner St., Mile End, E.1. Dean—Prof. W. Wright, M.B., D.Sc., F.R.C.S. Secy.—E. J. Burdon. Women students are not eligible for admission.

Founded 1781. Appointed and Recognized Teachers—44 (v. p. 91); others—65. Laboratories include those of Path. Inst. for Advanced Research. 950 beds. *Fees*: entrance, 20 gs.; annual, 40 gs. 34 scholps. and prizes. *Hostel*. 150 appointments available for students. *Number of Students*: 394 (Med. and Dent.).

LISTER INSTITUTE OF PREVENTIVE MEDICINE, Chelsea Bridge Rd., S.W.1. Director—Prof. C. J. Martin, C.M.G., M.B., D.Sc., F.R.S.

Founded 1901 for Research into causation, prevention, and treatment of diseases of men and animals. Open to Research students of both sexes, usually without fee. Appointed and Recognized Teachers—6 (v. p. 91); 10 other members of scientific staff. *Number of Students*: 25.

LONDON (ROYAL FREE HOSPITAL) SCHOOL OF MEDICINE FOR WOMEN, 8 Hunter St., Brunswick Sq., W.C.1. Dean—Miss L. B. Aldrich-Blake, M.D., M.S. Warden and Secy.—Miss Brooks.

Founded 1874. Appointed and Recognized Teachers—23 (v. p. 91); others—32. 240 beds. Special arrangements with several other Hospls. for Clin. study and dresserships, etc. Research Laboratories: Anat., Biol., Chem., Path., Pharmacol., Physics, Physiol. Courses for B.Sc. Hons. in Anat. and Physiol., as well as for Med. degrees and diplomas. *Fees*: Composition, for full Med. course, £240, in annual instalments, £35, £60, £60, £50, £35. Dental course, £80. *Scholarships*, etc., open to students of the School who have graduated in London, £40 and £30; to all Med. women, preferably those coming from or going to India, £100. Many other Scholps. *Residence*: furnished and unfurnished service chambers at from £48 to £108 p.a. for set.

MIDDLESEX HOSPITAL, Mortimer St., W.1. Dean—A. E. Webb-Johnson, C.B.E., F.R.C.S. School Secy.—R. A. Foley. Secy. to Council—W. Kewley.

Founded 1835. Appointed and Recognized Teachers—34 (v. p. 91); others—13. Over 450 beds, including Cancer wing (90); Bland-Sutton Institute of Path. with Museum and Labs., Cancer Research Labs., new Bio-Chem. Labs. *Fees*: Entrance, 15 gs.; annual, £42. *Scholarships*, etc., worth £1000 p.a. *Number of Students*: 460, and 200 Dental students.

NAVAL MEDICAL SCHOOL OF THE ROYAL NAVAL COLLEGE, Greenwich, S.E.10. Director of Med. Studies—Surg.-Comdr. R. St. G. Bond, R.N., M.B., D.P.H.

Opened 1912. Courses (twice a year) in General and Naval Hygiene, Clin. Path., Micro-Biology, for acting Surg.-Lieuts. (2 mos., followed by 4 mos. at Haslar Hospl.); Surg.-Lieuts. (5 mos.) for promotion; for Senior Med. Officers (3 mos.). Number of officers under instruction (average)—80 a year.

ST. GEORGE'S HOSPITAL, Hyde Park Corner, S.W.1. Dean—J. A. Torrens, M.D., F.R.C.P.

Founded 1752. Appointed and Recognized Teachers—22 (v. p. 91); others—19. 440 beds. *Fees*: entrance for Clinical course, 10 gs. Annual composition, 40 gs. Scholarships, etc., worth £270 p.a. for encouragement of research. *St. G.'s Gazette* is issued 3 times a year. *Number of Students*: 60 men.

ST. MARY'S HOSPITAL, Paddington, W.2. Dean—C. M. Wilson, M.D., F.R.C.P. Secy.—B. E. Matthews, B.A. Women students are admitted.

Founded 1852. Appointed and Recognized Teachers—35 (v. p. 91); others—6. *Fees*: Course for 1st M.B., 3 terms, 20 gs.; subsequent yrs., 40 gs. p.a. *Scholarships*: £100, £50, £25, and 2 of 50 gs. *Clinical Units* in Med. and Surg. established in 1920–21. *Number of Students*: part-time, 110; full-time, 288.

ST. THOMAS'S HOSPITAL, Albert Embankment, S.E.1. Dean—Sir Cuthbert S. Wallace, K.C.M.G., C.B. Medical Secretary—A. Elliot, M.A., M.D.

Founded in 16th century. Recognized Teachers—42 (v. p. 91); others—36. Path. Dept. includes Museum with 3000 specimens. Large Laboratories for teaching and research. Hospl. beds, 602. *Fees*: Tuition per annum, £50. Hostel accommodation for 15. *Number of Students* (men only): 480.

TROPICAL MEDICINE, LONDON SCHOOL OF. Dean—Sir Havelock Charles, G.C.V.O., I.M.S., M.D. Secy.—Sir J. Michelli, C.M.G., Seamen's Hospital, Greenwich, S.E.10. Open to both sexes.

Founded 1899; attached to the Hospl. for Tropical Diseases, Endsleigh Gdns., Euston Rd., N.W.1. Appointed and Recognized Teachers—9 (v. p. 91). Library, Museum, and up-to-date Laboratories with accommodation for 100. Special Depts. for Entom., Helminth., Proto-zool. In the various Hospls. of the Society are always numerous cases of Trop. Diseases. The funds available for encouraging research include Wandsworth Bequest, £10,000, and £60 p.a. from E. J. Stanley Memorial. Many Trop. Research expeditions have been equipped and maintained by the School. Students must be qualified Med. practitioners or in 5th yr. of Med. studies. There are 3 sessions of 12 weeks each. An examn. is held at end of each term. Trop. Med. courses suitable for candidates for the M.D. in Trop. Med., Camb. diploma in Trop. Med. and Hyg., and diploma in Dis., etc., of Tropics of Roy. Colls. Certificates granted. Proposals for station at Apia under consideration. *Fees*: 20 gs. for 12 weeks. *Number of Students* about 60 per session.

UNIVERSITY COLLEGE HOSPITAL, Gower St., W.C.1. Dean—G. F. Blacker, C.B.E., M.D., F.R.C.P., F.R.C.S. Open to both sexes.

The Med. School was separated from the Univ. Coll. Med. Faculty in 1905. Recognized Teachers—27 (v. p. 91); others—84. *Library*, 13,500 vols.

The *Charles Graham Laboratories*, under the direction of Prof. A. E. Boycott, were established in 1902 for research in Path. A limited number of qualified students are admitted as Lab. workers, to whom grants may be made. *Fees*: course for Final M.B., B.S., or 3rd examn. of Conjoint Board—112 gs. *Scholarships, etc.*: annual value, £1250. *Residence* for Maternity students. *Publications*: *Prospectus, Transactions of Research Dept., Magazine* (Students'). *Number of Students*, 259.

WESTMINSTER HOSPITAL, 12 Caxton St., Westminster, S.W.1. Dean—A. S. Woodwark, C.M.G., C.B.E., M.D., F.R.C.P. Secy.—Major J. Burke. Women students are admitted.

Founded 1834. Recognized Teachers—21 (v. p. 91); others—11. *Fees*: 35 gs. p.a. and 10 gs. entrance. *Number of Students*: 51.

## INSTITUTIONS WITH RECOGNIZED TEACHERS

[(a) Principal. (b) Subjects in which recognized. (c) Number of students.]

1. UNIVERSITY OF LONDON, GOLDSMITHS' COLLEGE, New Cross, S.E.14. Incorporated in the Univ. Warden, and Principal of the Training Dept.—T. Rayment, M.A. Vice-P'pals. of Training Dept.—F. H. C. Brock, M.A., and Miss C. C. Graveson, B.A.

Opened in 1905 in buildings presented by the Goldsmiths' Company, whose "Technical and Recreative Institute" had been carried on therein since 1891. Open to both sexes. Recognized Teachers—9 (v. p. 91—Art, Classics, Educn., Engl., Hist., Maths.); others—59.

*Training Department.* Recognized by Bd. of Educn. as a Training Coll. (Elem.). Ordinary course—2 yrs., or for students preparing for B.A. (Pass) degree—3 yrs. Lectrs. and Instrs.—36. *Annual fee* for tuition with mid-day meal: £21. Hostels provide accommodation for nearly all the women and many men students.

*School of Art* (Day and Evening). Headmaster and 8 Assts. *Fees*: Day, £5 to £15; Evening, 10s. to 30s., per session.

*Engineering and Building Dept.* (Evening). Carried on at expense of L.C.C. and only temporarily retained at the Coll. Courses: College Certif. and Diploma; C.G.I. examns.; Engineering Degree (5 yrs.).

2. BATTERSEA POLYTECHNIC, Battersea Park Rd., S.W.11. (a) R. H. Pickard, D.Sc., F.R.S. (b) Chem., Engin. (Civ., Elec., Mech.), Maths., Music, Physics. (c) 3253.

4. CITY OF LONDON COLLEGE, White St., Moorfields, E.C.2. (a) S. Humphries, B.A., LL.B. (b) French, Law (Comm. and Merc.), Maths. (c) Day, 376; Evg., 2443.

5. FINSBURY TECHNICAL COLLEGE, Leonard St., Finsbury, E.C.2. *Dean*—W. H. Eccles, D.Sc., F.R.S., M.I.E.E. (b) Elec. Engin., Maths., Physics. (c) Day, whole-time, 128.

6. JEWS' COLLEGE, Queen Sq. House, Guilford St., W.C.1. (a) A. Büchler, Ph.D. (b) Hebrew, Semitics. (c) 17.

7. NORTHAMPTON POLYTECHNIC INSTITUTE, St. John St., E.C.1. (a) R. M. Walmsley, D.Sc., M.I.E.E. (b) Engin. (Elec., Civil, Mech.), Maths., Chem., Physics, Surv. (c) 2411.

8. NORTHERN POLYTECHNIC INSTITUTE, Holloway Rd., N.7. (a) R. S. Clay, D.Sc., B.A. (b) Bot., Chem., Geol., Maths., Physics, Zool. (c) 2943.

9. ROYAL VETERINARY COLLEGE, Gt. College St., Camden Town, N.W.1. (a) Sir John McFadyean, M.B., C.M., B.Sc., LL.D., M.R.C.V.S. (b) Biol., Chem., Vet. Anat., Vet. Hyg., Vet. Path. and Bact., Vet. Physiol. (c) 144.

10. SIR JOHN CASS TECHNICAL INSTITUTE, Jewry St., Aldgate, E.C.3. (a) C. A. Keane, D.Sc., Ph.D., F.I.C. (b) Chem., Maths., Physics. (c) 1000.

11. CHELSEA POLYTECHNIC, Manresa Rd., Chelsea, S.W.3. (a)

- S. Skinner, M.A. (b) Bot., Chem., Geol., Maths., Metall., Music, Physics, Zool. (c) Day, 910; Evg., 4502.
12. WEST HAM MUNICIPAL COLLEGE, Romford Rd., West Ham, E.15. (a) T. C. Baillie, M.A., D.Sc. (b) Chem., Engin. (Civ., Elec., Mech., Maths., Physics. (c) Day, 320; Evg., 1685.
13. WOOLWICH POLYTECHNIC, Lower Market St., Woolwich. (a) A. F. Hogg, M.A., F.C.S. (b) Chem., Engin. (E., M.), Maths., Phys. (c) 1200.
14. MARIA GREY TRAINING COLLEGE, Salusbury Rd., Brondesbury, N.W.6. (a) Miss K. L. Johnston, M.A. (b) Educn. (c) 117.
15. ST. MARY'S COLLEGE, 34 Lancaster Gate, W.2. (a) Miss H. L. Powell. (b) Pedagogy. (c) 16.
16. BOROUGH ROAD COLLEGE, Spring Grove, Isleworth. (a) T. H. Miller, M.A., D.Sc. (b) Maths. (c) Resident, 139; non-resident, 4.
17. ST. MARK'S COLLEGE, King's Rd., Chelsea, S.W.10. (a) R. Hudson, M.A. (b) Educn. (c) 132.
18. ROTHAMSTED EXPERIMENTAL STATION, Harpenden, Herts. *Director*—Sir John Russell, D.Sc., F.R.S. (b) Agricultural Science. (c) 5. v. Appendix IV.
19. ROYAL ACADEMY OF MUSIC, Marylebone Rd., N.W.1. (a) Sir A. C. Mackenzie, K.C.V.O., Mus.D., LL.D., D.C.L., F.R.A.M. (b) Music. (c) 725.
20. ROYAL COLLEGE OF MUSIC, Prince Consort Rd., S. Kensington, S.W.7. *Director*—Prof. Sir H. P. Allen, M.A., Mus.D., F.R.C.M. (b) Music. (c) 500.
21. TRINITY COLLEGE OF MUSIC, Mandeville Place, W.1. *Chairman of the Board*—Sir Frederick Bridge, C.V.O., D.Mus., M.A. (b) Educn. (Ped. as applied to Music), Theoretical M. subjects. (c) 650.
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*Agricultural Botany* [Sen. Lectr.  
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*Agricultural Entomology*  
Smith, K. M., A.R.C.S. Sen. Lectr.

*Anatomy*  
Stopford, J. S. B., M.D. Prof.  
Wood, W. H., B.Sc., M.B. Lectr.  
Sellars, Ruth, B.Sc. Edin. Lectr.  
Morley, J., M.B., Ch.M., F.R.C.S.  
Lectr. (Applied A.).  
Holmes, A. H., M.D. " "  
Jefferson, G., M.S., F.R.C.S. " "  
Morison, J. M. W., M.B., C.M.  
Glas. Lectr. (Applied A.).  
3 Demrs.

*Arabic*  
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*Archæology*  
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(Classical A.) Lectr. (S.),  
Peet, T. E., M.A. Ox. (Egyptol.)  
Lectr.

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A.R.I.B.A. Prof.  
Macgregor, J., A.R.I.B.A. Lectr.  
Drury, F. E., F.I.S.E., M.C.I.  
Lectr. (Bldg. Constn.).  
Worthington, J. H., M.A.  
Lectr. (Town Planning).

Asst. Lectrs. :  
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Cordingly, R. A., B.A., A.R.I.B.A.  
1 Instr. in Drawing.

*Banking*

Bellhouse, H. H. Lectr.  
 Fraser, Sir D. D., K.B.E., M.Com.  
 (H.).

*Botany*

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 F.R.S. Harrison Prof.  
 Adamson, R. S., M.A., B.Sc. Edin.,  
 M.A. Camb. Sen. Lectr.  
 Howarth, W. O., M.Sc. Lectr.  
 Williams, S., B.Sc. Asst. Lectr.

*Botany, Cryptogamic*

Lang, W. H., M.B., C.M., D.Sc.  
 Glas., F.R.S. Barker Prof.  
 Robinson, Wilfrid, D.Sc.  
 Sen. Lectr.

*Chemistry, v. also Physics,*  
*Physiol., Pub. Health, Tech.*

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 Sir S. Hall Prof.  
 Robinson, R., D.Sc. St. And.,  
 F.R.S. (Organic C.) Prof.  
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 Ph.D. Prague, M.Sc., F.R.S.  
 Hon. Prof.  
 Burt, F. P., M.B.E., B.Sc. Lond.,  
 D.Sc. Bris. (Stoichio-C.)  
 Reader.

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 Myers, J. E., O.B.E., D.Sc.  
 Stephen, H., O.B.E., D.Sc.  
 Challenger, F., D.Sc. Birm., B.Sc.  
 Lond., Ph.D. Gött.

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 Henry, D. C., B.A. Camb.  
 Fairbrother, F., M.Sc. Asst.  
 Harwood, J., M.Sc. Asst.  
 Royle, F. A., M.Sc., Ph.D. Asst.  
 Weston, A., B.Sc. Asst.  
 Core, C. G., M.Sc. Asst.  
 Gaul, E. G., M.Sc. (Bact. C.).  
 2 Demrs.

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 Hulme Prof. of Greek  
 and Lectr. in Christian  
 Epigraphy.

Conway, R. S., Litt.D. Camb.  
 and Dub. F.B.A. (Latin and  
 Indo-Eur. Philol.)

Hulme Prof.  
 Anderson, W. B., M.A. Camb.,  
 D.Litt. Aberd. (Imperial  
 Latin) Prof.

Braunholtz, G. E. K., M.A. Camb.  
 (also Lectr. in Indo-Eur.  
 Philol.) Sen. Lectr.

Husband, Jeanie, B.A. Liv.  
 Lectr.

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 (Hellenistic Greek) Lectr.

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(Com. and Administn.) Prof.  
 Ashton, T. S., M.A. Senr. Lectr.  
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Research Asst.

*Economic History*

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*Education*

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 M.Ed. Prof.

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Sarah Fielden Prof.  
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 M.Ed. (H.).

Eggar, Margaret E., N.F.U.  
 Lectr.



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 Deaf.) E. Ll. Jones Lectr.  
 Conway, Gladys, B.A. Liv. (Con-  
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 (N.U.I.) Lectr.  
 Hindshaw, Winifred, M.A., M.Ed.  
 Lectr.

Clarke, Winifrid S. Lectr.  
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 and Manc., M.A. Lectr.  
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 M.A. Dub. (S.).  
 Paton, J. L., M.A. Camb. (S.).  
 Oppenheimer, Mary (Handwork  
 and Drawing) Lectr.  
 Keighley, T., Mus.D. (Elementary  
 E.—Singing) Lectr.  
 Medical Officers and 3 Instrs. for  
 Elem. E. Dept.

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*Electro-Chemistry*, v. Physics

*Electro-Technics*

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 Water Supply and  
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 E.) (S.).

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 Wright, J. D., M.A. Senr. Lectr.  
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 Sheavyn, Phoebe, D.Lit. Lond.  
 (S.).

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 Paris (Language) Prof.  
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 Valette, Mme. Andrée, L. ès L.  
 Paris Lectr.  
 Fawtier, R., L. ès L., Ag. d'Hist.  
 Lectr.

Crump, Phyllis E., M.A. Lond.  
 Lectr.  
 Fawtier, Mme. Ethel, D. de l'U.  
 Paris Asst. Lectr.  
 Bearman, Ethel C., B.A. Ox. , ,

*Geography*

[Reader.

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 Gauld, W. A., B.A. Liv.  
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 Dawkins, Sir Wm. Boyd, M.A.,  
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 (Path.)  
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 and Manc. (Roman) (S.)  
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 Fawtier, R., D. ès L. (French)  
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 Eastwood, R. A., LL.D. Sen. Lectr.  
 Osborne, F. B., M.A. Ox. Lectr.  
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*Mathematics, v. also Tech.*  
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 D.Sc., F.R.S. (M. and Nat.  
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 Fielden Reader.  
 . . . . . Lectr.  
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 Lectr.
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 Asst. Lectr.  
*Medicine, v. infra*  
*Metallurgy and Metallography,*  
 v. also Tech.  
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 D.Met. Sheff. Prof.  
 O'Neill, H., M.Met. Sheff.  
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 Asst. Lectr.  
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*Music, v. also Physics (Acoustics)*  
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 Keighley, T., Mus.D. Lectr.  
 Wilcock, A. W., Mus.D. Lectr.  
*Palæography*  
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*Philology, v. Classics, German*  
*Philosophy, v. also Pol., Psych.,*  
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 Ph.D. Heid., D.Sc., F.R.S.  
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 Lobley, A. G., M.Sc. (Electro-  
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 Ph.D. Bonn. Sen. Lectr.  
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 Watson, W. H., B.Sc. Asst. Lectr.  
 Brentano, J. C. M., D.Sc. Mun.  
 Asst. Lectr.  
 Blackaby, J. H., B.Sc. Lond.  
 Asst. Lectr.  
 Lowery, H., B.Sc. Lond.  
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Lamb, F. W. J. A., B.A., M.D.,  
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Dub. Lectr. (Chem. P.).  
McSwiney, B. A., M.B. Dub.  
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*Railway Practice*

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Perry, W. J., B.A. Camb. (Comp.  
Religion) Reader.

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Parsons, R. G., M.A. Ox. (Bib. Cr.).

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Mumford, A. H., B.A. Lond., B.D.  
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Brewis, J. T., B.A., B.D.  
Moulton, W. J., M.A., B.D. Camb.  
Townsend, H., M.A., D.D. Lond.  
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M.Sc. Sen. Lectr.

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Wardle, R. A., M.Sc. (Econ. Z.).

*Medicine* (for subjects of first 2  
yrs.—Anat., etc., v. *supra*)

*Bacteriology*, v. Path., Pub.  
Health

*Cancer Research* (Swindells Lab.)

- White, C. P., M.A., M.D. Camb.,  
F.R.C.S. (H.) and Dir. of Lab.

*Children, Diseases of* [Lectr.

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*Children, Surgical Diseases of*

- Rayner, H. H., M.B., Ch.B.,  
F.R.C.S. (also in Clin. Surgery)  
Lectr.

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- Lancashire, G. H., M.D. Bruss.

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Sewell, D. L., M.B., B.S. Lond.  
(Ear) (C.).

- Westmacott, F. H., C.B.E.,  
F.R.C.S. (Throat and Nose)  
(C.).

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*Gynæc.*, v. Obst.

*Hygiene*, v. Pub. Health

*Infectious Diseases* [(C.).

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F.R.C.P. Leech Prof.

Grier, J., M.Sc. Lectr. & Demr.

Leech, E. B., M.D. Camb.,

F.R.C.P. Lectr.

Roberts, Ivy, B.Sc. (Pharm. and

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Rawsthorne, F., L.D.S. (Dent.

M.M.) Lectr.

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Lectr.

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Lectr.

Melland, C. H., M.D. Lond., B.Sc.

Lectr.

Core, D. E., M.D. (also in Neuro-

logy) Lectr.

Oliver, T. H., M.D. Lectr.

*Medicine, Systematic*

Murray, G. R., M.A., M.D. Camb.,

M.D. Dub., D.C.L. Durh.,

F.R.C.P. Prof.

Moore, F. Craven, M.D., M.Sc.,

F.R.C.P. Lectr.

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Roy, J. A. C., M.B., Ch.B. Lectr.

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F.R.C.P. Prof. (C.).

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M.D. Edin. Prof.

Shaw, W. F., M.D. Lectr.

Dougal, D., M.D. Asst. Lectr.

Clifford, H., M.B., F.R.C.S. Edin.

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Ch.B., F.R.C.S. (Clin. O.)

Wharton, J., M.D. Camb. (C.).

McNabb, H. H., M.D. (C.).

*Pathology and Path. Anat.*

Dunn, J. S., M.A., M.D. Glas.

Procter Prof.

Anderton, W. B., M.B. Lond. (P.

and Forensic M.)

Lectr. & Curator of Museum.

Dible, J. H., M.B. Glas.

(Bacteriology) Lectr.

Ryrie, B. J., M.B. Edin.,

(Path. A. and Histology) Lectr.

Loveday, G. E., M.A., M.B., B.C.

Camb. (Clin. P.) Lectr.

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Haworth, A., M.Sc., M.B., Ch.B.

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Children's Diseases

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Buckley, J. P., M.A., M.D., B.C.

Camb., M.B., M.S. Lond.,

F.R.C.S. (also in Regional

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F.R.C.S. Lectr.

*Surgery, Operative*

Wrigley, P. R., F.R.C.S. Lectr.

Wright, G., M.B., Ch.B. Edin.,

F.R.C.S. Lectr.

*Surgery, Practical*

Roberts, C., M.B., B.S. Lond.,

F.R.C.S. Lectr.

*Surgery, Regional*, v. Surg., Clin.

*Surgery, Systematic*

Telford, E. D., M.A., B.Ch. Camb.,  
F.R.C.S. Prof.

Hey, W. H., M.B., F.R.C.S.  
Lectr. and Asst.

*Surgical Pathology* [Lectr.

Ray, J. H., M.B., Ch.M., F.R.C.S

*Therapeutics*, v. Mat. Med.

*Vaccination*

Mitchell, A. M., M.B., Ch.B.  
Aberd. Lectr.

*Venereal Diseases* [Instr. (C.).

Macalpine, J. B., M.B., Ch.B.

Reid, W. J. S., M.A., M.D., B.Sc.  
Aberd. Instr. (C.).

Whitehead, Gordon, M.B., Ch.B.  
Instr. (C.).

Wilson, A., F.R.C.S. Instr. (C.).

Gibson, R., M.D. Edin. Instr. (C.).

**Dentistry**

Lectrs. :

Preston, C. H., M.D. Lond.,  
F.R.C.S., L.D.S. (Anat. and  
Physiol.).

Rodway, B. J., L.D.S. (Mechanics  
and Prosthetics).

Houghton, E., L.D.S. (Operative  
Surgery).

Headridge, D., L.D.S. (Histol.).

Headridge, J. P., B.Sc. Lond.,  
L.D.S., D.D.S. (Metall.).

Campion, G. G., L.D.S. (Ortho-  
dontics).

Simms, H., M.D., L.D.S. (Path.  
and Surg.).

Wild, Prof. (v. Med. (Mat. Med.).

Rawsthorne, F., L.D.S. (Mat.  
Med.).

Dunn, Prof. (v. Path.) (Bacterio-  
logy).

Buckley (v. Surg., Clin.).

**Public Health**

*Principles of P.H. and Bac-  
teriology* [Prof.

Topley, W. W. C., M.A., M.D.  
Camb., F.R.C.P. (Prof. of  
B. and Dir. of P.H. Lab.)

Sidebotham, E. J., M.A., M.B.  
Camb. Hon. Lectr. in P.H.

Ramsbottom, E. N., M.D. Lond.,  
D.P.H. (Pract. Bact. and  
Microscopy) Asst. Lectr.

Sellers, A., M.D. Edin., D.P.H.  
Lectr. in Bact.

Nutt, Miss M. M., Demr. in Bact.

Heap, H., M.Sc. (San. and Bact.  
Chem.) Sen. Lectr.

Dawson, G. D., M.D., D.P.H.  
2 Research Assts. [Asst. Lectr.

*Administration*

Butterworth, J. J., M.D., D.P.H.  
Lectr. in Hygiene and A

Brindley, A. E., M.D. Lond., B.Sc.,  
D.P.H. Lectr.

*Factory Hygiene*

Legge, T. M., M.A., M.D. Ox.,  
D.P.H. Lectr.

*School Hygiene*

Young, M., M.D. Edin., D.P.H.  
Lectr.

*Vet. Hygiene*

Woods, W., F.R.C.V.S. Lectr.

**Technology**

Jones, B. Mouat, M.A. Ox., Prin-  
cipal of the College of Tech.  
and Dean of the Faculty.

*Architecture*, v. *supra*

*Chemistry, Applied*

Pyman, F. L., Ph.D. Basle, D.Sc.,  
F.I.C., F.R.S.

Prof. of Technol. C.

Knecht, E., M.Sc.Tech., Ph.D.  
Zur., F.I.C., Assoc. Prof.

Lectrs. :

Grant, J., M.Sc.Tech., F.I.C.

Sinnatt, F. S., M.B.E., M.Sc. Tech.,  
F.I.C., M.I.Min.E. (Fuels).

Radcliffe, L. G., M.Sc.Tech., F.I.C.

Wood, J. K., D.Sc., F.I.C.  
(Physical C.).  
Hibbert, Eva, M.Sc.Tech.  
Asst. Lectr.

- Craven, Mrs. May B., M.Sc.Tech. Asst. Lectr.  
 Hepburn, G. G., B.Sc. St. And., Ph.D. Basle Spl. Demr.  
 8 Demrs.  
*Dyeing, Bleaching, and Printing and Paper Manuf.* [Lectr.  
 Huebner, J., M.Sc.Tech., F.I.C.  
 Rowe, F. M., D.Sc. Leeds, F.I.C. Lectr.  
*Engineering, Electrical*  
 Walker, Miles, M.A. Camb., D.Sc. Lond., M.I.E.E. Prof.  
 Lectrs. :  
 Langton, J. L., M.Sc., M.I.E.E.  
 Moore, A. E., M.Sc.Tech., M.I.E.E.  
 Clayton, A. E., B.Sc. Lond., A.M.I.E.E.  
 Asst. Lectrs. :  
 Palmer, L. S., M.Sc., Ph.D. Brist.  
 Glynne, A., M.A. Camb.  
 Shelley, H. J., B.Sc.  
*Engineering, Mechanical* [Prof.  
 Stoney, G. G., M.A.I. Dub., D.Sc. Durh., M.I.C.E., M.I.M.E., M.I.E.E., F.R.S.  
 Lectrs. :  
 Jordan, H. G., M.Sc.Tech., A.R.C.S.I., M.I.M.E.  
 Petrie, P. T., M.Sc. Leeds. A.M.I.C.E., A.M.I.M.E.  
 Popplewell, W. C., M.Sc., A.M.I.C.E.  
 Smith, Dempster, M.B.E., M.Sc.Tech., M.I.M.E.  
 Jones, T. H., M.Sc., A.M.I.M.E. (Eng. Drawing).  
 Boswall, R. O., B.Sc.Eng. Lond., A.M.I.M.E.  
 Anderson, R. M., A.G.T.C., M.Sc.Tech.  
 Threlfall, H., M.Sc.Tech., A.R.C.S.I.  
 Asst. Lectrs. & Demrs. :  
 Edmondson, A. R., M.Sc., A.M.I.C.E., A.M.I.M.E.  
 Ferguson, R. M., M.Sc.  
 Bevan, T., M.Sc.Tech.
- Carrington, H., B.Sc., M.Sc.Tech., A.M.I.M.E.  
*Engineering, Sanitary* [Lectr.  
 Radcliffe, J., M.Sc.Tech., F.R.Met.S., F.R.San.I.  
 Coleman, G. S., D.Sc. Lond., A.M.I.C.E. Lectr.  
*Languages (Modern)*  
 Kirk, A., M.A. Camb. Lectr.  
*Mathematics*  
 Prescott, J., M.A., D.Sc. Lectr.  
 Bowman, F., M.A. Camb., M.Sc.Tech. Lectr.  
 Barratt, W. S., A.R.C.S.I., A.I.C. Asst. Lectr.  
 Tilsley, H., B.Sc. (Eng.) Lond. Asst. Lectr.  
*Metallurgy & Assaying*  
 Rhead, E. L., M.Sc.Tech., F.I.C., M.Am.I.M.E. Lectr.  
 Mohn, G., M.Sc. Demr.  
*Photographic Tech.* [Lectr.  
 Gamble, C. W., O.B.E., M.Sc.Tech.  
*Physics* [Lectr.  
 Gee, W. W. Haldane, B.Sc. Lond., M.Sc.Tech., A.M.I.E.E.  
 Adamson, A., M.Sc.Tech., A.R.C.S. Lectr.  
 Mercer, H. N., M.A. Tor., B.Sc. Lond. Asst. Lectr.  
 Anderson, W., B.Sc. Glas., , ,
- Textile Industries*  
 Turner, A. J., M.A. Camb., B.Sc. Lond. Prof.  
 Myers, W., M.Sc.Tech. Lectr.  
 Winterbottom, J., M.Sc.Tech. Lectr.  
 Cadness, H. (Design) (S.).  
 Hanton, W. A., M.Sc.Tech. (T. Engin.) Lectr.  
 Dust, Emily R. (Design) Asst. Lectr.  
 English, W. (Spinning) Asst. Lectr. (S.).
- Tutorial Classes**  
 20 Tutors

## ASSOCIATED COLLEGES

THE COLLEGE OF TECHNOLOGY originated in the Mechanics' Institution, founded in 1824, and developed between 1879 and 1912 under the direction of J. H. Reynolds as the Technical School (1883) and Municipal School of Technology (1901). In 1903 were completed, with the help of benefactions from the estate of Sir Joseph Whitworth, buildings covering 7300 sq. yards in the centre of the city and worth with their equipment £400,000. It became connected with the Univ. of Manchester in 1905 through the constitution of a Faculty of Technology, the greater part of the work of which is conducted in the College, whose Principal is Dean of the Faculty.

## COLLEGES recognized for External Lectures in Theology :

BAPTIST COLLEGE, EGERTON HALL, HARTLEY PRIMITIVE METHODIST COLLEGE, MORAVIAN COLLEGE, Fairfield, UNITARIAN HOME MISSIONARY COLLEGE, and UNITED METHODIST COLLEGE at Manchester; LANCASHIRE INDEPENDENT COLLEGE, Whalley Range; WESLEYAN COLLEGE, Didsbury.

Recognized for instruction in Maths., Physics, Chem., and Biol. up to Intern. standard for B.Sc. and B.Sc.Tech.: the HARRIS INSTITUTE, Preston.

For third year of B.Sc.Tech. course in Mining: the CAMBORNE SCHOOL OF METALLIFEROUS MINING.

## GENERAL INFORMATION

Owens College, named after a Manchester merchant who bequeathed £96,000 for its foundation, was opened in 1851. The Manchester School of Medicine was united with it in 1872. The Charter of 1880 by which the Victoria Univ. was founded established a federal constitution and made Owens a constituent Coll. of the Univ. Subsequently Univ. Coll., Liverpool, and Yorkshire Coll., Leeds, were admitted as constituent Colls. A new Charter was issued on July 15, 1903, reconstituting the Univ. under the name of the Vict. Univ. of Manchester and freeing it from liability to admit or remain in association with any Coll. other than Owens, and on June 24, 1904, the Act for the incorporation of Owens Coll. with the Univ. was passed. The Univ. Press was established in 1902.

In 1905, on the establishment of the Faculty of Technology, the work of Univ. standard at the Municipal School (now College) of Tech. was included in the Univ.

Most of the buildings, arranged in two quadrangles, and erected from time to time during the past 50 years, are situate in the city. The athletic ground (13 acres) is at Fallowfield, about  $1\frac{1}{2}$  miles distant.

LIBRARIES. The main (Christie) library (over 176,000 vols.) includes the private collections of Profs. Freeman and Stanley Jevons and Dr. Christie. Scientific periodicals are taken in by the Univ. in co-operation with the Manchester Literary and Philosophical Society, so that between them all the most important are available for both. The Manchester Medical Society's Library (46,500) is housed in the Medical School, where it is available for students. The John Rylands (250,000) includes the Althorp Library and the Crawford collection of MSS. It contains one of the most important collections of early printed books in existence. The ancient Chetham Library (70,000) has valuable mediæval MSS. and printed books of seventeenth and eighteenth

centuries. The Municipal Reference Library (194,000) is valuable for more recent books and periodicals.

**LABORATORIES, ETC.** Ample equipment for advanced study and research in all departments; special provision for Electro-Technics, Economic Zoology (including Agric. Entom.) and Botany, Radio-activity, Ionization of Gases, Pathology of Cancer. The Fielden School is organized mainly for demonstration, training, and research in Educn. The Manchester *Museum*, forming part of the Univ. buildings, and containing among other special depts. the Flinders Petrie Egyptol. Collection, is utilized for Univ. teaching in Zool., Bot., and Geol.; it is also used for systematic instruction of Elem. school children. Available for clinical instruction are 4 general *Hospitals*, 1 Dental and 7 other special hospls. including the Christie Cancer Pavilion. The Howard Estate *Observatory* in the Peak District is for investigation of the Upper Atmosphere.

**FACULTIES.** Arts; Science; Theology; Law; Medicine; Music; Commerce; Technology (provided by the Municipal College of Technology); Education. *Departments:* Educn., Dent., Pharm., Pub. Health, and seven depts. of Technology (*see below*). There are Advisory Committees for Archit., Mining, Tech., Commerce, Theol., Pub. Health, Leg. Educn., and for Training Teachers of the Deaf.

**DEGREE COURSES.** 3 yrs. (graduates of other approved Univs., 2 yrs.)—B.A., B.Sc. (B.Sc. in Pub. Health, 2 yrs. subsequent to gradn. in Med.), LL.B., Mus.B., B.Com., B.D. (after Interm. courses in Arts), B.Sc.Tech.; 5 yrs.—B.A. (Hons. in Archit.), M.B., Ch.B., B.D.S. The B.Com. course can be completed by attendance on evening lectures.

Honours students of French may be permitted to count attendance during 1 summer term (last but one) at Caen as equivalent to attendance at Manc.

Minimum attendance in the Univ. for graduation—2 yrs. Minimum attendance for Bachelorship in 2 Faculties—5 yrs.

**HIGHER DEGREES.** Open to Bachelors of 1 yr. standing—M.A., M.Sc. (2 yrs. if graduates of other Faculties), LL.M. (2 yrs.), Ch.M., M.D., M.D.S., M.Com., M.Sc.Tech.; 2 yrs.—M.Ed.; 4 yrs.—Litt.D., D.Sc., LL.D., Mus.D., D.D.

Open to graduates of other approved Univs. through research in Manc. during 2 yrs. (non-graduates 3 yrs.)—M.A., M.Sc., LL.M., M.Sc.Tech., M.Ed. (not open to non-graduates). Graduates of other approved Univs. of 4 yrs.' (D.D. 6 yrs.) standing who have obtained the degree of Master or one substantially equivalent thereto and spent 2 yrs. in study or research in Manc. may qualify for the Litt.D., D.Sc., LL.D., D.D.

The Ph.D. differs from the Litt.D. and D.Sc. in requiring a definite course of study, and is of a lower standard though higher than the M.A., M.Sc., and M.Sc.Tech. (v. p. 15).

**DIPLOMAS.** Geog. (grads.), 1 yr. course; D.V.S.M., open to M.R.C.V.S. only, 6 mos.; Psych. Med. 1 yr., including 2 terms at the Univ.; D.P.H. 9 mos.; Teacher's (grads.) 1 yr.; L.D.S., 4 yrs.

**CERTIFICATES.** Engin., 3 yrs.' course; Applied Chem., 3 yrs.; Archit., 3 yrs.; Mining; Factory or School Hygiene (subsequent to obtaining D.P.H.); Higher Commercial, 2 yrs. (grads. 1 yr.); Theol., 3 yrs.; Biblical Knowledge; Tech. (Assoc. Coll. Tech.), 3 yrs.; Tech. (Distinction), 4 yrs.; Photog. Tech., 2 yrs.

Certif. in Mining and the B.Sc.Tech. in Mining are accepted by Govt. in lieu of 2 out of 5 yrs.' practical experience for Mine Manager's Certif.



## SPECIAL COURSES on Tuberculosis for Med. and Vet. practrs.

SCHOLARSHIPS, ETC., FOR GRADUATES. A considerable number are offered every year by the Univ., most of them reserved for its own graduates, but some—in Chemistry, £300 and £100; Economics, £70; Engineering, two of £200 each; Diseases of Children, £100; Physics, £125; Prev. Med., £300—are open to foreign students; others—in Industry and Comm., £200 (travelling); History, £50—are open to British subjects who have graduated at other Univs. Honorary Research Fellowships and Research Studentships, entitling the holders to the use of facilities for research either free or at greatly reduced fees, are also awarded.

FEES. Matricn., £2. Tuition, per session, including Students' Union and Athletic Union fees: for B.A. course, 26 gs. (Hons. in Archit., first 3 yrs. £42 per session, 4th and 5th yrs. £28 per session); B.Sc., 31 to 41 gs. (Hons. in Maths., 26 gs.); M.B., Ch.B. (5 sessions), 140 gs., *plus* Hospl. fees, 60 gs.; LL.B. (3 sessions), 37 gs.; B.D., 13 gs.; B.Com., 16-19 gs.; Mus.B., 7 gs.; B.D.S., 93 gs., *plus* Hospl. fees, 175 gs.; L.D.S., 83 gs., *plus* Hospl. fees, 135 gs.; (35 gs. if approved instrn. recd. from regd. dentist); Teacher's Dipl., £35. Examn. fees: Med., 32 gs., others (Interm. and Final) for first degrees about 6 gs. (B.Sc., 4 to 5 gs.). Graduation fees, 8 gs. (Doctorate 15 gs., except Ph.D. £5).

Research fees, 7 to 10 gs. per session in Arts, Commerce, and Law; Educn., 4 gs.; higher fees for other science students.

HOSTELS. For men: Hulme Hall (Warden), £75-£95 per session; Dalton Hall (Principal), £108; St. Anselm's Hall (Warden), £99. For women (122): Ashburne Hall (Warden), 64 to 70 gs.; Langdale Hall (Warden), chiefly for women training students, whose fees are £42, private students, £70; Ellis Llwyd Jones Hall, special hostel for students in training as teachers of the deaf; Ward Hall (Warden); Lees Hall (Warden); St. Gabriel's Hall (Warden). Lancashire Independent College (Principal) for men students.

INDIAN STUDENTS. Adviser—J. K. Wood, D.Sc.

ADULT EDUCATION. The Committee for the organization of the Extramural work of the Univ., and the Joint Committee for Tutorial Classes are responsible for the provision of facilities for Adult Education at the Univ. itself, and at other Centres. Public Lectures, Univ. Extension Courses, Tutorial Classes for Workpeople, and other Classes for adult students are arranged, and Tutors and Lecturers are appointed.

PERIODICAL PUBLICATIONS. *Calendar* (Sept.), 2s. 6d.; *Prospectus of Advanced Studies*; *Examn. Papers*, 6d. to 1s. 6d. a set, by Faculties; *The French Quarterly*, 3s.; *Bulletin of John Rylands Library*; *Journal*, 1s. quarterly; *Lancs. and Cheshire Naturalist*, monthly 9d.; *Journal of Manc. Egyptol. and Orient. Soc.*

## THE YEAR 1921-22

BENEFACTIONS AND GRANTS. Treasury grant (additional to recurrent grant of £56,000), £20,000 for provision of residential accommodation for women students; local authorities' grants increased by £5850; Lady Sheffield's bazaar proceeds, £15,940 (given to Appeal Fund, which by close of year reached £250,443); Lewis's Ltd., £1000 (first instalment of £3000) for graduate scholarships in Commerce and for Economic library; Dr. C. Slater, £1100 towards research fellowship in Preventive Med. (Delépine Memorial); Hermann

Woolley estate, £1000 towards lect'ship in Pharmaceutics; £302 for T. C. Horsfall civics research prize fund; nomination to two Bythell memorial scholarships; also numerous gifts of equipment, books, and works of art from industrial firms and other friends of the Univ.

CHANGES IN REGULATIONS, ETC. New degree of LL.M. instituted; Ordinances and Regns. for LL.B. and LL.D. revised; provision made for course for B.A. with Hons. in Archit. to extend over 5 yrs. and to exempt from Final examn. for A.R.I.B.A. except in "Professional Practice." After 1923, entrants into the Med. faculty will be required to show adequate knowledge of Mechanics.

NEW BUILDINGS. Two houses acquired for Archit. dept.; Union buildings enlarged; additional athletic ground (8 acres) acquired, fenced, and levelled.

OTHER DEVELOPMENTS. Complete X-ray installation in Anatomical dept.; School of Architecture formerly under joint management by the Univ. and Manc. Educn. Committee became a purely Univ. dept.; grant to Museum increased by £200 a year; number of research students increased to 54; activities of Appointments Board were suspended indefinitely; Manchester Luncheon Club was established on lines of Leeds Luncheon Club, many University teachers being members, and intercourse between City, University, and Professions being thus promoted.

DEATH. Prof. Delépine.

RETIREMENTS AND RESIGNATIONS. Prof. D. H. Macgregor, on apptmt. to chair in Oxford, succeeded by H. Clay from Oxford; Prof. J. W. Smith; Prof. H. R. Dean, on apptmt. to chair in London, succeeded by J. S. Dunn from Birmingham; W. T. Waugh, on apptmt. to post in McGill Univ.; W. M. Tattersall, on apptmt. to chair in Cardiff; Prof. H. B. Dixon, succeeded by A. Lapworth, whose place was taken by R. Robinson from St. Andrews. *Prof. Emeritus*—J. W. Smith.

HONORARY DEGREES. *Litt.D.*—G. F. Hill, W. R. Lethaby, Graham Wallas, H. Pirenne, C. H. Haskins, S. Reinach. *D.Sc.*—G. H. Hardy, Sir E. J. Russell, H. B. Dixon. *LL.D.*—G. E. Maclean, A. Mansbridge, Lady Sheffield. *M.A.*—T. R. Ackroyd, S. Withers, J. K. Pyne. *M.Sc.Tech.*—J. Crompton. *M.Com.*—G. W. Daniels, H. S. Ferguson.

NUMBER OF STUDENTS. Total, 2864 (women 711), of whom: Medical, 734 (including women, 149); Technological, 452 (women, 4).

EXTRA-MURAL WORK. 30 classes, of which 6 were in Manchester, were conducted by 20 tutors. Summer School at Bangor (1921) attended by 114 students (39 women), 22 tutors and lecturers being in residence. 19 public lectures by eminent authorities. 17 special extension courses at the Univ. and other centres, comprising 132 lectures.

# UNIVERSITY OF OXFORD

CHANCELLOR—The Most Hon. MARQUESS CURZON OF KEDLESTON,  
D.C.L. All Souls.

HIGH STEWARD—Right Hon. EARL OF BIRKENHEAD.

VICE-CHANCELLOR—L. R. FARNELL, M.A., D.Litt., Rector, Exeter  
College.

REPRESENTATIVES IN PARLIAMENT (BURGESSES OF THE UNIVERSITY)—  
LORD HUGH R. H. CECIL, M.A. Hertford; Sir CHAS. W. C.  
OMAN, M.A. All Souls.

PROCTORS—V. J. K. BROOK, M.A. Linc.; F. W. GREEN, M.A. Merton.

ASSESSOR OF THE CHANCELLOR'S COURT—Sir E. J. TREVELYAN, D.C.L.  
All Souls.

PUBLIC ORATOR—A. D. GODLEY, M.A., Hon. D.Litt. Magdalen.

BODLEY'S LIBRARIAN—A. E. COWLEY, M.A., D.Litt. Magdalen.

KEEPER OF THE ARCHIVES—R. L. POOLE, M.A. Magdalen.

REGISTRAR—C. LEUDESORF, M.A. Pembroke.

ASSISTANT REGISTRAR AND SECRETARY TO THE BOARDS OF FACULTIES—  
E. S. CRAIG, M.A. Magdalen.

## COLLEGES

ALL SOULS COLLEGE	<i>Warden</i>	F. W. PEMBER, M.A., D.C.L.
BALLIOL           ,,	<i>Master</i>	A. L. SMITH, M.A.
BRASENOSE       ,,	<i>Principal</i>	C. H. SAMPSON, M.A.
CHRIST CHURCH	<i>Dean</i>	H. J. WHITE, D.D.
CORPUS CHRISTI COLLEGE	<i>President</i>	T. CASE, M.A.
EXETER           ,,	<i>Rector</i>	L. R. FARNELL, M.A., D.Lit.
HERTFORD       ,,	<i>Principal</i>	W. R. B. RIDDELL, M.A.
JESUS           ,,	„	E. G. HARDY, M.A., D.Litt.
LINCOLN         ,,	<i>Rector</i>	J. A. R. MUNRO, M.A.
MAGDALEN       ,,	<i>President</i>	Sir H. WARREN, K.C.V.O., M.A., Hon. D.C.L.
MERTON          ,,	<i>Warden</i>	T. BOWMAN, M.A.
NEW             ,,	„	W. A. SPOONER, D.D.
ORIEL           ,,	<i>Provost</i>	L. R. PHELPS, M.A.

PEMBROKE COLLEGE	<i>Master</i>	F. HOMES DUDDEN, D.D.
QUEEN'S       ,,	<i>Provost</i>	J. R. MAGRATH, D.D.
ST. JOHN'S     ,,	<i>President</i>	H. A. JAMES, D.D.
TRINITY       ,,	,,	H. E. D. BLAKISTON, D.D.
UNIVERSITY   ,,	<i>Master</i>	R. W. MACAN, M.A., D.Lit.
WADHAM       ,,	<i>Warden</i>	J. WELLS, M.A.
WORCESTER    ,,	<i>Provost</i>	F. J. LYS, M.A.
ST. EDMUND HALL	<i>Principal</i>	G. B. ALLEN, B.D.
KEBLE COLLEGE (New Foundation)	<i>Warden</i>	B. J. KIDD, D.D.

*Censor of Non-Collegiate Students*—J. B. BAKER, M.A.

### PRIVATE HOSTELS

CAMPION HALL	<i>Licensed Master</i>	J. H. KEANE, M.A.
ST. BENET'S HALL	,,       ,,	P. J. MCCANN, M.A.

### RECOGNIZED SOCIETIES OF WOMEN STUDENTS

LADY MARGARET HALL	<i>Principal</i>	Miss LYNDIA GRIER, M.A.
SOMERVILLE COLLEGE	,,	Miss E. PENROSE, O.B.E., M.A.
ST. HUGH'S COLLEGE	,,	Miss E. F. JOURDAIN, M.A.
ST. HILDA'S HALL	,,	Miss WINIFRED H. MOBERLY, M.A.
SOCIETY OF OXFORD HOME STUDENTS	,,	Miss CHRISTINE M. E. BURROWS, M.A.

### PROFESSORS, LECTURERS, ETC., January 1, 1923.

<i>Agriculture</i> , v. p. 162	<i>Anthropology, Physical</i> [Lectr.
<i>Anatomy</i> , v. also Zoology	Buxton, L. H. D., M.A. Exe.
Thomson, A., M.A. Ch. Ch.	<i>Anthropology, Social</i> [Reader.
Lee's Prof.	Marett, R. R., M.A., D.Sc. Exe.
Dodds-Parker, A. P., B.M., M.A.	<i>Archæology</i> , v. also Orient.
Magd. (Applied A.)   Lectr.	Langs. and Papyr.
MacKeith, M. H., B.M. Magd.,	Gardner, P., M.A., D.Litt. Linc.
Edin.                   Asst.	(Classical A. and Art)
Whitelocke, H. A. B., B.M., M.A.	Linc. & Mert. Prof.
Ch. Ch.                   Asst.	Casson, S., M.A. New (Classical
Chance, Alice, M.A.       Asst.	A.)                           Lectr.
<i>Anglo-Saxon</i>	Evans, Sir Arthur J., M.A.,
Craigie, W. A., M.A. Or.	D.Litt., B.N.C. (Prehist. A.)
Rawlinson and Bosworth Prof.	Prof.

Beazley, J. D., M.A. Ch. Ch.  
Lectr. (Gk. vases).

*Aramaic*, v. Orient.

*Art*

Carline, S. W. (Drawing)  
Ruskin Master.

Hind, A. M., M.A. Camb. (Fine  
Art) Slade Prof.

*Assyriology*, v. Oriental Lan-  
guages

*Astronomy*

Turner, H. H., M.A., D.Sc. New  
Savilian Prof.

Rambaut, A. A., M.A. Qu.  
Radcliffe Observer.

*Bio-Chemistry*

..... Whitley Prof.  
Raiment, P. C., B.A. Univ. Demr.  
Peskett, G. L., B.A. New Lectr.

*Botany*

Keeble, Sir F. W., C.B.E., M.A.  
Magd. Sherardian Prof.

Church, A. H., M.A., D.Sc. Jes.  
Lectr. & Senr. Demr.

Snow, G. R. S., B.A. Demr.

*Celtic*

Fraser, J., M.A. Jes. Jesus Prof.

*Chemistry*

Perkin, W. H., M.A. Magd.  
Waynflete Prof.

Marsh, J. E., M.A. Mert. Demr.

Hope, E., M.A. Magd. Demr.

Sidgwick, Nevil V., M.A. Linc.  
Demr.

Hammick, D. Ll., M.A. Oriol  
Demr.

Plant, S. G. P., B.A., B.Sc. Magd.  
Demr.

Taylor, T. W. J., M.A. B.N.C.  
Demr.

Soddy, F., M.A. Ch. Ch.  
Lee's Prof.

Lambert, B., M.A. Mert.  
Aldrichian Demr.

Walden, A. F., M.A. New College  
Demr.

Hartley, E. G. J., M.A. Ch. Ch.  
Demr.

Applebey, M. P., B.Sc., M.A. St. J.  
Demr.

*Classics*, v. also Arch.

Murray, Gilbert, M.A., D.Litt.  
Ch. Ch. (Greek) Reg. Prof.

Tod, M. N., M.A. Or. (Greek Epi-  
graphy) Lectr.

Clark, A. C., M.A. C.C.C. (Latin)  
Corpus Prof.

Anderson, J. G. C., M.A. Ch. Ch.  
(Roman Epigraphy) Lectr.

*Crystallography*, Chem.

Barker, T. V., B.Sc., M.A. B.N.C.  
Lectr.

*Diplomatic*

Poole, R. L., M.A. Magd. Lectr.

*Divinity*, v. Theology

*Economics*, v. Pol. Econ.

*Education*

Keatinge, M. W., M.A. Exe.  
Reader.

Hendy, F. J. R., M.A. Linc.  
Dir. of Training.

Seely, H. E. M., M.A. B.N.C.  
Asst. Lectr.

*Egyptology*, v. Orient.

*Engineering Science*, v. also Sur-  
veying

Jenkin, C. F., M.A. B.N.C. Prof.

*English*

Gordon, G. S., M.A.  
Mert. (E. Lit.) Prof.

Wyld, H. C. K., B.Litt., M.A.  
Mert. (E. Lang. and Lit.)

Smith, D. Nichol, M.A. Worc.  
Merton Prof.

Simpson, P., M.A. Or. Lectr.  
Goldsmiths' Reader.

Onions, C. T., M.A. Or. Lectr.

Wilson, F. P., B.Litt. Linc. Lectr.

*Forestry*, v. also Surv.

Troup, R. S., M.A. Prof.

Hiley, W. E., M.A. Qu. (Diseases  
of Trees) Research Offr.

*French*

Rudler, G., Dr. ès L. Paris (Fr. Lit.), M.A. Worc. Foch Prof.

*Taylorian Lectrs.:*

Berthon, H. E., M.V.O., M.A. Wadh. (Senior Lecturer).

Waters, E. G. R., M.A. Keb.

Pope, Mildred K., M.A. Som.

Ewert, A., M.A., St. J.

*Genetics, v. Zool.**Geography, v. also Surv.*

Beckitt, H. O., M.A. Ball. Reader.

MacMunn, Nora E., M.A.

Soc.O.H.S. Demr.

Cossar, J., M.A. Asst.

*Geology*

Sollas, W. J., M.A. Univ. Prof.

Douglas, J. A., B.Sc., M.A. Keb.

Demr.

Bayzand, C. J., Non-Coll. Demr.

*Geometry* [Savilian Prof.]

Hardy, G. H., M.A. New Coll.

*German* [Taylorian Prof.]

Fiedler, H. G., M.V.O., M.A. Qu.

(G. Lang. and Lit.)

Montgomery, M., M.A., B.Litt.

Linc. Taylorian Lectr.

*Greek, Byzantine and Modern, Lang. and Lit.*

Dawkins, R. McG., M.A. Exe.

Bywater & Sotheby Prof.

*Hebrew, v. Orient.**History, American*

Morison, S. E., M.A.

Harold Vyvyan Harmsworth Prof.

*History, Ancient, v. also Archæol.*

Jones, H. Stuart, M.A., D.Litt.,

B.N.C. Camden Prof.

Myres, J. L., M.A. New Coll.

Wykeham Prof.

*History, Colonial* [Beit Prof.]

Coupland, R., M.A. Trin.

Wrong, E. M., M.A. Magd.

Beit Lectr.

*History, Eccl., v. Theology**History, Econ., v. Pol. Econ.**History, English*

Robinson, J. A., D.D. (for 1923-

1924: Sir W. J. Ashley,

M.A.) Ford's Lectr.

*History, Indian*

Lovett, Sir H. V., K.C.S.I., M.A.

Worc. Reader.

*History, Military, v. Milit.**History, Modern, v. also Dipl.*

Firth, Sir Charles H., K.B.E., M.A.

Or. Reg. Prof.

Oman, Sir C. W. C., M.A. All S.

Chichele Prof.

*Italian*

Foligno, C., M.A. Qu. Serena Prof.

Del Re, A., M.A. Lond.

Taylorian Lectr.

*Law, v. infra**Logic* [Wykeham Prof.]

Joachim, H. H., M.A. New Coll.

*Mathematics, Pure*

Dixon, A. L., M.A. Magd.

Waynflete Prof.

*Mathematics, Applied* [Lectr.]

Pidduck, F. B., M.A. C.C.C.

*Medicine, v. infra**Meteorology* [Lectr.]

Dobson, G. M. B., M.A. Camb.

*Military History* [Chichele Prof.]

Wilkinson, H. S., M.A. All S.

*Mineralogy*

Bowman, H. L., M.A., D.Sc.

Magd. Waynflete Prof.

*Music* [Prof.]

Allen, Sir H. P., M.A., D.Mus. New

Ley, H., M.A., D.Mus. Ch. Ch.

Choragus (Asst. to Prof.).

*Oriental Languages, v. infra**Palæography*

Lowe, E. A., M.A., G.C.C. Lectr.

*Papyrology*

Hunt, A. S., M.A., D.Litt. Qu. Prof.

*Philology, Comparative*

Wright, J., M.A. Exe. Prof.

*Philosophy, Expl.* [Lee's Prof.  
Lindemann, F. A., M.A. Wadh.  
Griffith, I. O., M.A. St. J. Demr.  
Dobson, G. M. B., M.A. Camb.

Demr.  
Bosanquet, C. H., M.A. Ch. Ch.  
Demr.

*Philosophy, Mental*, v. also  
Logic  
Brown, Wm., D.M. Ch. Ch.  
Wilde Reader.

*Philosophy, Moral, & Metaphys.*  
Smith, J. A., M.A. Magd.  
Waynflete Prof.

*Philos., Moral* [White's Prof.  
Stewart, J. A., M.A. C.C.C.

*Philos., Natural* [Sedleian Prof.  
Love, A. E. H., M.A., D.Sc. Qu.

*Physics* [Wykeham Prof.  
Townsend, J. S. E., M.A. New  
Lattey, R. T., B.Sc., M.A. Trin.  
Demr.

Gill, E. W. B., B.Sc., M.A. Mert.  
Demr.

Morrell, J. H., M.A. Magd. Demr.  
Biggs, H. F., M.A. Trin. Demr.  
Bailey, V. A., M.A. Qu. Demr.  
Hume-Rothery, J. H., M.A. Camb.  
Demr.

*Physiology*, v. also Medicine  
Sherrington, Sir Charles S., G.B.E.,  
M.A., Hon. D.Sc. Magd.  
Waynflete Prof.

Priestley, J. G., D.M.  
Welch Lecturer

Douglas, C. G., B.Sc., D.M. St. J.  
Demr.

Liddell, E. G. T., B.M., M.A.  
Trin. Demr.

Carleton, H. M., B.Sc., M.A. New  
Coll. Demr.

*Poetry*  
Ker, W. P., M.A. All Souls Prof.

*Political Econ.* [Drummond Prof.  
Macgregor, D. H., M.A. All S.

Lipson, E., M.A., New Coll. (Ec.  
Hist.) Reader.

*Political Theory and Institns.*  
Adams, W. G. S., M.A. All S.  
Gladstone Prof.

*Religion*, v. also Theology  
Selbie, W. B., D.D., B.N.C. (Nat.  
and Comp. R.) Wilde Lectr.

*Romance Lang.* [Taylorian Prof.  
Studer, P., M.A. Exe.

*Russian* [Prof. and Reader.  
Forbes, N., M.A. Ball.

*Spanish*  
de Arteaga y Pereira, Don  
Fernando, M.A. Worc.

Prof. and Taylorian Lectr.  
Kolkhorst, G. A., B.A. Exe.  
Taylorian Lectr.

*Spectroscopy* [Prof. & Reader.  
Merton, T. R., M.A., D.Sc. Ball.

*Surveying* (for Engin., Forestry,  
and Geog. Students)  
Mackenzie, N. F., Hon. M.A. Instr.

*Thermodynamics*  
Egerton, A. C. G., M.A. Reader.

*Zoology and Comp. Anat.*, v. also  
Rural Econ.  
Goodrich, E. S., M.A. Mert.

Linacre Prof.  
Poulton, E. B., M.A., D.Sc. Jes.  
(Zool.) Hope Prof.

..... Aldrichian Demr.  
Carr-Saunders, A., M.A. Magd. ,,  
de Beer, G. R., B.A. Magd.

Demr.  
Huxley, J. S., M.A. New Coll.  
Lectr. in Genetics and Demr.

## Law

*Civil*  
De Zulueta, F., M.A., D.C.L.  
All S. Reg. Prof.

*Criminal, and Evidence*  
..... Lectr.

*English* [Vinerian Prof.  
Holdsworth, W. S., D.C.L. All S.

Hazel, A. E. W., C.B.E., B.C.L.,  
M.A. Jes. All Souls Reader.

*Indian* [Reader.  
Trevelyan, Sir E. J., D.C.L. All S.

*Internat., and Diplomacy*  
Brierly, J. L., B.C.L., M.A. All S.  
Chichele Prof.

*Internat. (Private)*  
Cheshire, G. C., B.C.L., M.A. Exe.  
Lectr.

*Jurisprudence*  
Vinogradoff, Sir Paul, M.A., Hon.  
D.C.L., C.C.C. Corpus Prof.

*Roman*  
Jolowicz, H. F., M.A.  
All Souls Reader.

*Roman-Dutch* [Rhodes Prof.  
Lee, R. W., D.C.L. Ball.  
(Reader at Inns of Court)

*Medicine* (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Anatomy, Morbid*  
Gibson, A. G., D.M. Ch. Ch. Lectr.

*Clinical Physiology*  
Priestley, J. G., D.M. Ch. Ch.  
Christopher Welch Lectr.

*Medicine* [Reg. Prof.  
Garrod, Sir A. E., K.C.M.G., D.M.  
Mallam, E., D.M. Magd.  
Litchfield Lectr.

Other Clinical Instructors in  
Med. and Surg. :  
Waters, W. A. P., D.M.  
Dodds-Parker, A. P., B.M., M.A.  
Whitelocke, H. A. B., B.M., M.A.  
Collier, W. T., B.M., M.A.  
Whitelocke, R. H. A., Hon. M.A.

*Ophthalmology*  
Adams, P. E. H., B.M., M.A. Exe.  
Margaret Ogilvie's Reader.

*Pathology*  
Dreyer, G., M.A. Linc. Prof.  
Walker, E. W. A., D.Sc., D.M.  
Univ. Dean of Med. Sch. Lectr.

*Pharmacology* [Prof. & Reader.  
Gunn, J. A. M.A. Qu.

*Surgery* [Litchfield Lectr.  
Bevers, E. C., B.M., M.A. St. J.

### Oriental Languages

*Arabic* [Laudian Prof.  
Margoliouth, D. S., D.Litt. New

*Aramaic* [Lectr.  
Stenning, J. F., C.B., M.A. Wadh.

*Assyriology* [Shillito Reader.  
Langdon, S., M.A. Jes. Prof. &

*Bengali*  
Thompson, E. J. Lectr.

*Burmese*  
..... Lectr.

*Chinese*  
Soothill, W. E., M.A. Trin. Prof.

*Egyptology*  
Griffith, F. Ll., M.A. Qu. Reader.

*Hebrew* [Reg. Prof.  
Cooke, G. A., D.D. Ch. Ch.  
Loewe, H. M. J., M.A. Exe.  
(Rabbinic H.) Lectr.

*Hindustani*  
Dewhurst, R. P., M.A. Ball. Lectr.

*Marathi*  
Jopp, C. H. K., M.A. New Lectr.

*Persian*  
Levy, R., M.A. Jes. Lectr.

*Sanskrit* [Boden Prof.  
Macdonell, A. A., M.A. Ball.  
Morison, J., M.A. Ball. Lectr.  
Pargiter, F. E., M.A. Exe. (*Pali*)  
Lectr.

*Tamil and Telugu*  
Roberts, S. G. Lectr.

### Rural Economy

Somerville, W., M.A., D.Sc. St. J.  
[Sibthorpe Prof.  
Ellis, J. C. B., M.A. Jes. Demr.  
Doyle, H. C., M.A. Trin. Demr.

*Agr. Botany* [Lectr.  
Bancroft, Helen, D.Sc. Lond.



- Agr. Chemistry* [Lectr. & Demr.  
Morison, C. G. T., M.A. Ball.
- Agr. Economics*, v. also Estate  
Ashby, A. W., Dipl. Econ. Lectr.
- Agr. History*  
Lennard, R. V., M.A. Wadh. Lectr.
- Agr. Law*  
Hilliard, E., M.A. Ball. Lectr.
- Co-operation* [Lectr.  
Hart-Synnot, R. V. O., M.A., St. J.
- Economic Zoology*  
Cunliffe, N. (M.A. Camb.)  
Christopher Welch Lectr.
- Estate Management*  
Orwin, C. S., M.A. Ball. (Dir. of  
Inst. for Research in Agr.  
Economics) Lectr.
- Thring, D. T., Hon. M.A. Mert. „  
*Local Govt. and Land Tenure*  
James, W. E. C., B.A. Magd. Lectr.
- Lock, W., D.D. Keb.  
Margaret Prof.
- Eccles. History* [Reg. Prof.  
Watson, E. W., D.D. Ch. Ch.
- Exegesis* [Dean Ireland's Prof.  
Turner, C. H., M.A. Magd.
- Interpretation of Holy Script.*  
Burney, C. F., M.A., D.Litt. Or.  
Oriol Prof.
- Liturgiology* [Lectr.  
Brightman, F. E., M.A. Magd.
- Pastoral Theology* [Reg. Prof.  
Ottley, R. L., D.D. Ch. Ch.
- Philos. of Christian Religion*  
Webb, C. C. J., M.A. Oriol  
Oriol Prof.
- Septuagint*  
Davies, A. Ll., M.A. Qu.  
Grinfield Lectr.

### Theology

- Bib. Studies* [Speaker's Lectr.  
Bate, H. N., M.A. Magd.
- Divinity*  
..... Reg. Prof.

### Adult Education

- Lecturers employed under the  
direction of the Univ. Ex-  
tension Delegacy (about 30),  
v. pp. 178, 181.

## THE COLLEGES

ALL SOULS COLLEGE. Founded 1437. Warden—F. W. Pember, D.C.L.  
Fellows: Abel-Smith, L. R., M.A.; Adams, W. G. S., M.A., Prof. of Pol.  
Theory, etc.; Archibald, J. G., M.A.; Beckett, W. E., B.A.; Brand, Hon.  
R. H., C.M.G., M.A.; Bridges, E. E., M.A.; Burt, H. T., B.A.; Cholmondeley,  
F. G., M.A.; Corbett, P. E., B.A.; Coupland, R., M.A., Prof. of Col. History;  
Craster, H. H. E., M.A., D.Litt., Sub-Warden; Curtis, L. G., M.A.; Dawson,  
G. G., M.A., Estates Bursar; de Zulueta, F., D.C.L., Reg. Prof. of Civil Law;  
Dibblee, G. B., M.A., Dom. Bursar, Dean; Edgeworth, F. Y., M.A.; Egerton,  
H. E., M.A., Prof. of Col. Hist.; Faber, G. C., M.A.; Harris, C. R. S., B.A.;  
Holdsworth, W. S., D.C.L., Prof. of Engl. Law; Holland, Sir T. E., D.C.L.;  
Jacob, E. F., M.A.; Johnson, A. H., M.A.; Ker, W. P., M.A., Prof. of Poetry;  
Lang, Rt. Hon. and Most Rev. C. G., M.A., Hon. D.D.; Lawrence, T. E., C.B.,  
B.A.; Lee, R. W., D.C.L., Prof. of Rom.-Dutch Law; Lucas, Sir C., K.C.B.,  
K.C.M.G., M.A.; Macgregor, D. H., M.A., Prof. of Polit. Econ.; Malcolm,  
D. O., M.A.; Morrah, D. MacG., M.A.; Oman, Sir C. W. C., K.B.E., M.A.,  
Librarian, Prof. of Mod. Hist.; Pollard, A. F., M.A.; Radcliffe, C. J., B.A.;  
Robertson, C. G., C.V.O., M.A.; Simon, Rt. Hon. Sir John A., K.C.V.O.,  
K.C., M.A.; Somervell, D. B., M.A., Dean; Summer, B. H., M.A.; Trevelyan,  
Sir Ernest, J., D.C.L., Reader in Ind. Law; Wilkinson, H. Spenser, M.A.,  
Chich. Prof. of Milit. Hist.; Woodward, E. L., M.A.

BALLIOL COLLEGE. Founded 1263-1268. Master—A. L. Smith, M.A., Jowett Fellow.

Fellows : Bailey, C., M.B.E., M.A., Jowett Fellow, *Classics* \* and Tutor for admissions ; Bell, K. N., M.A., Junr. Dean, *Mod. Hist.* \* ; Gibbon, H. H., O.B.E., M.A., Chaplain, Catech. Lectr. ; Hartley, H. B., C.B.E., M.A., *Science*, \* ‡ *Phys. Chem.* ; Hilliard, E., M.A., B.C.L., Senior Bursar, *Law* \* ; Lindsay, A. D., C.B.E., M.A., *Classics* \* ; Macdonell, A. A., M.A., Prof. of Sansk. ; Macgregor, D.C., M.A., *Classics*, \* ; MacMurray, J., Jowett Lectr. in *Philos. Classics* \* ; Merton, T. R., M.A., D.Sc., Prof. of Spectroscopy ; Morris, C. R., B.A., *Classics* \* ; Newman, W. L., M.A., Hon. D.Litt. ; Nicholson, J. W., M.A., *Maths. and Physics* \* ; Orwin, C. S., M.A. ; Pickard-Cambridge, A. W., M.A., Jowett Fellow, *Classics*, \* ‡ *Greek*, Librarian ; Ridley, M. R., M.A., Chaplain, *Engl. Lit.* \* ; Stone, C. G., M.A., *Hist.* \* ; Urquhart, F. F., M.A., Senr. Dean, *Mod. Hist.* \*

Other Lectrs. etc. : Todd, J. A., M.A., ‡ *Econ.* ; Walker, E., D.Mus., M.A., Dir. of Music ; Priestley, J. G., D.M. Ch. Ch., ‡ *Physiol.* ; Duke, A. C. H., C.M.G., Dom. Bursar ; Sumner, B. H., M.A., *Mod. Hist.* \*

BRASENOSE COLLEGE. Founded 1509. Principal—C. H. Sampson, M.A.

Fellows : Barker, T. V., M.A., B.Sc. ; Butler, A. J., M.A., D.Litt. ; Evans, Sir A. J., D.Litt., F.R.S., Prof. of Archæol. ; \* Griffith, I. O., M.A. ; \* Holroyd, M., M.A. ; Jeffery, R. W., M.A. ‡ ; Jenkin, C. F., C.B.E., M.A., Prof. of Engin. ; Jenkinson, A. J., O.B.E., M.A., Librarian, Senr. Dean, *Litt. Hum.* \* ; Jones, H. S., M.A., D.Litt., Prof. of Anc. Hist. ; Platnauer, M., B.Litt. ‡ ; Stallybrass, W. T. S., O.B.E., M.A., \* Vice-Principal ; Stocker, W. N., M.A., ‡ *Nat. Sc.*, Home Bursar ; Taylor, T. W. J., M.A., ‡ *Nat. Sc.* ; Wace, H. C., M.A., *Theol.*, *Classics*, \* Chaplain, Bursar ; Wakeling, G. H., O.B.E., M.A., Senr. Tutor.

Other Lectrs. : Brett-Smith, H. F. B., M.A., *Engl. Lit.* ; Bromley, T. M., M.A., *Classics*.

CHRIST CHURCH. Founded 1546. Dean—Very Rev. H. J. White, D.D.

Canons : Cooke, G. A., D.D., Reg. Prof. of Hebrew ; Headlam, A. C., C.H., D.D., Reg. Prof. of Div. ; Lock, W., D.D., Lady Marg. Prof. of Div. ; Ottery, R. L., D.D., Reg. Prof. of Past. Theol. ; Shaw, Rt. Rev. and Ven. E. D., D.D., Archdeacon of Oxford ; Watson, E. W., D.D., Reg. Prof. of Eccles. Hist.

Students (equivalent to Fellows) : Anderson, J. G. C., M.A., \* *Classics* ; Barrington-Ward, J. G., M.A., \* *Classics* ; Beazley, J. D., M.A., \* *Classics* ; Blunt, H. W., M.A., \* *Classics* ; Carter, A. T., C.B.E., D.C.L., K.C., \* *Law* ; Chaundy, T. W., M.A., \* *Maths.* ; Dundas, R. H., M.A., Censor, \* *Classics* ; Feiling, K. G., O.B.E., M.A., \* *History* ; Hassall, A., M.A., \* *Hist.* ; Heaton, T. B., O.B.E., D.M., Lee's Reader in *Anat.* ; Garrod, Sir A. E., K.C.M.G., D.M., F.R.S., Reg. Prof. of *Med.* ; Hutchinson, G. T., M.A., Treasurer ; Lindemann, F. A., M.A., F.R.S., Lee's Prof. of Exp. Philos. ; Masterman, J. C., M.A., Censor, \* *Hist.* ; Murray, Gilbert, M.A., D.Litt., Reg. Prof. of *Greek* ; Murray, J., M.A., \* *Classics* ; Owen, S. G., M.A., \* *Classics* ; Payne-Smith, W. H., M.A. ; Rawlinson, A. E. J., B.D., M.A., \* *Theol.* ; Russell, A. S., M.A., Lee's Reader in *Chem.* ; Slessor, Major A. K., M.A., Steward ; Soddy, F., M.A., F.R.S., Lee's Prof. of Chem. ; Taylor, F. A., B.A. \* ; Thomson, A., M.A., Lee's Prof. of Anat.

Lectrs. : Bosanquet, C. H., M.A. Ball., Lee's Reader in *Physics* ; Sutton, C. W. H., B.A., *Philos.* ; Harrod, H. R. F., B.A. New, *Mod. Hist.*

CORPUS CHRISTI COLLEGE. Founded 1516. President—T. Case, M.A.

Fellows : Clark, A. C., M.A., Corpus Prof. of *Latin* ; Grundy, G. B., M.A.,

\* Tutor.

‡ Lecturer.

D.Litt., Vice-Pres., \*; Livingstone, R. W., M.A., \* Librarian; Mowat, R. B., M.A., Asst. Tutor; Oddie, J. W., M.A.; Phelps, W., M.A., Dean, Asst. Tutor; Pidduck, F. B., M.A., Asst. Tutor; Plummer, C., M.A.; Schiller, F. C. S., M.A., D.Sc. \*; Stewart, J. A., M.A., Prof. of Moral Philos.; Vinogradoff, Sir Paul, M.A., Hon. D.C.L., Corpus Prof. Jurispr.

Lectrs. not on the Foundation: Miles, Sir J. C., M.A., B.C.L. Mert., *Jurispr.*; Hammick, D. L., M.A. Or., *Nat. Sci.*; Lightfoot, R. H., M.A., *Theol.*  
Bursar: Lightfoot, H. Le B., M.A.

EXETER COLLEGE. Founded 1314. Rector—L. R. Farnell, D.Litt., Vice-Chancellor.

Fellows: Atkinson, C. T., M.A., † *Modern Hist.*; Barber, E. A., M.A.; Sub-Rector, \* † *Classics*; Cheshire, G. C., B.C.L., M.A., Bursar, † *Law*; Henderson, B. W., M.A., D.Litt., Senior Tutor; Marett, R. R., M.A., D.Sc., \*, Dean, Reader in Soc. Anthropol.; Raikes, H. R., M.A., \* *Nat. Sci.*; Williams, N. P., B.D., M.A., Chaplain Fellow, † *Theol.* Non-stipendiary: Balfour, H., M.A.; Dawkins, R. MacG., M.A.

Other Lectrs.: Douglas, C. G., B.Sc., D.M. St. J., *Physiol.*; Lattey, R. T., B.Sc., M.A. Trin., *Physics*; Loewe, H. M. J., M.A., *Hebrew*; Stampa, L., M.A. Magd., *Modern Hist.*; Waters, E. G. R., M.A. Keb., *French*; Wilson, F. P., B.Litt. Linc., *Engl.*; Wood, G. R., M.A. Mert., *Maths.*

HERTFORD COLLEGE. Founded 1874. Principal—W. R. B. Riddell, M.A.

Fellows: Boase, T. S. R., B.A., † *Mod. Hist.*; Campbell, J. E., M.A., F.R.S., \* † *Maths.*, Vice-Principal; Campbell, J. McL., M.A., Chaplain; Cecil, Rt. Hon. Lord Hugh, M.A., M.P.; Cruttwell, C. R. M. F., M.A., Dean, \* † *Mod. Hist.*; Denniston, J. D., O.B.E., M.A., Librarian, \* † *Classics*; Hasel-foot, C. E., M.A., Bursar, \* † *Nat. Sci.*; Jackson, C. N., M.A.; Murphy, N. R., M.A., † *Philos.*; Whatley, N., M.A., Senr. Tutor, † *Anc. Hist.*

Other Lectrs.: Allen, C. K., M.A. Univ., *Jurispr.*; Emmet, C. W., B.D., M.A. Univ., *Theol.*

JESUS COLLEGE. Founded 1571. Principal—E. G. Hardy, M.A., D.Litt.

Fellows: Chapman, D. L., M.A., F.R.S., Tutor in *Nat. Sc.* and Junr. Bursar; de Winton, Ven. F. H., M.A.; Dodd, P. W., M.A., Asst. Tutor, *Litt. Hum.*; Edwards, J. Goronwy, M.A., Librarian, Asst. Tutor, *Mod. Hist.*; Fraser, J., M.A. Aberd., Prof. of Celtic; Genner, E. E., M.A., Senr. Tutor, *Classics*; George, H. J., M.A., Research Fellow, Asst. Tutor, *Chem.*; Hazel, A. E. W., M.A., B.C.L., Vice-Principal, Senr. Bursar, Dean, Asst. Tutor, *Law*; Hodgkinson, J., M.A.; Joyce, G. C., D.D.; Poulton, E. B., M.A., F.R.S., Prof. of Zool.

Other Lectrs., etc.: Seymour, P. A., M.A., Asst. Tutor, *Classics*; Simpson, D. C., B.D., M.A., Keb., † *Theol.*; Simpson, P., M.A. Or., † *Engl. Lang. and Lit.*; Stenning, J. F., C.B., C.B.E., M.A. Wad., † *Orient. Langs.*; Waters, E. G. R., M.A. Keb., † *French.*

LINCOLN COLLEGE. Founded 1427. Rector—J. A. R. Munro, M.A.

Fellows: Brook, V. J. K., M.A., Dean, † *Theol.*; Carlyle, E. I., M.A., Bursar, Librarian, † *Modern Hist.*; Dreyer, G., C.B.E., M.A., F.R.S., Prof. of *Path.*; Gardner, P., M.A., D.Litt., Prof. of Class. Archæol. and Art; Han-bury, H. G., B.A., Jr. Tutor, † *Jurispr.*, Marchant, E. C., M.A., \* Sub-Rector, Sr. Tutor; Sidgwick, N. V., M.A., F.R.S., † *Nat. Sc.*

Other Lectrs.: Carlyle, A. J., M.A., D.Litt. Univ., *Engl. Lit.*; Jeffery, R. W., M.A. B.N.C., *Mod. Hist.*; Morison, C. G. T., M.A. Ball., *Agr. Chem.*; Ward, H. K., New Coll., *Physiol.*

\* Tutor.

† Lecturer.

MAGDALEN COLLEGE. Founded 1458. President—Sir H. Warren, K.C.V.O., M.A., Hon. D.C.L.

Fellows: Baker, G. E., M.A.; Bell, C. F., M.A.; Benecke, P. V. M., M.A., \* *Classics*; Brightman, F. E., M.A.; Bowman, H. L., D.Sc., Prof. of Mineralogy; Bradley, H., M.A., Hon. D.Litt.; Carter, C. R., M.A., Estates Bursar; Coolidge, W. A. B., M.A.; Cowley, A. E., M.A., D.Litt.; Craig, E. S., M.A.; Dixon, A. L., M.A., F.R.S., Prof. of Maths.; Driver, G. R., M.A., \* *Classics*, Jr. Dean of Arts; Gunther, R. W. T., M.A., Librarian; Hodgson, L., M.A., \* *Theol.*, Dean of Div., Sec. to Tut. Board; Hogarth, D. G., C.M.G., M.A., D.Litt.; Hope, E., M.A., \* *Chem.*; Keeble, Sir F. W., C.B.E., M.A., Sc.D., F.R.S., Prof. of Botany; Kirk, K. E., M.A.; Lee, S. G., M.A., \* *Hist.*, Sr. Dean of Arts; MacKeith, M. H., B.M., M.A., \* *Med. and Biol.*; Manley, J. J., M.A.; Miers, Sir H. A., M.A., D.Sc., F.R.S.; Pedder, A. L., M.A., \* *Maths. and Physics*; Perkin, W. H., M.A., F.R.S., Prof. of Chem.; Poole, R. L., M.A., *Vice-President*; Price, H. H., B.A.; Salter, H. E., M.A.; Segar, R., B.A., \* *Law*; Sherrington, Sir C. S., G.B.E., M.A., Hon. D.Sc., F.R.S., Prof. of Physiol.; Smith, J. A., M.A., Prof. of Philos.; Snow, G. R. S., B.A.; Thompson, J. M., M.A., \* *Hist.*, Home Bursar; Turner, C. H., M.A., Prof. of Exegesis; Wilson, H. A., M.A.; Wrong, E. M., M.A., \* † *Hist.*

Other Lectrs.; Kemshead, C. T. T., M.A., *Modern Subjects*; Weldon, T. D., B.A., *Litt. Hum.* (1922-23).

MERTON COLLEGE. Founded 1264. Warden—T. Bowman, M.A.

Fellows: Allen, P. S., M.A., Librarian; Bradley, F. H., M.A.; Deane-Jones, I., B.A.; Fyfe, W. H., M.A.; Garrod, H. W., M.A., *Class.* \* Principal of Postmrs.; Gill, E. W. B., O.B.E., M.A., B.Sc., Sub-Warden, Dom. Bursar; Goodrich, E. S., M.A., F.R.S., Prof. of Zool., etc.; Gordon, G. S., M.A., Prof. of Engl. Lit.; Green, F. W., M.A., \* *Theol.*, ‡ *Div.*; How, W. W., M.A., Sen. Tutor, *Class. and Anc. Hist.* \*; Lambert, B., O.B.E., M.A., \* *Nat. Sc.*; Marsh, J. E., M.A., F.R.S.; Miles, Sir J. C., M.A., B.C.L., *Law*, \*; Mure, G. R. G., M.A., \* Dean; Smith, D. Nichol, M.A., Reader in English; Wyld, H. C. K., B.Litt., M.A., Prof. of Engl. Lang. and Lit.

Other Lectrs.: Campbell, J. E., M.A. Hert., *Maths.*; Johnson, A. H., M.A., All S., *Modern Hist.*

NEW COLLEGE. Founded 1379. Warden—W. A. Spooner, D.D.

Fellows: Allen, Sir H. P., M.A., D.Mus., Prof. of Music; Casson, S., M.A.; Courtney, W. L., M.A.; Fisher, Rt. Hon. H. A. L., M.A.; Haldane, J. S., M.A., F.R.S.; Hardy, G. H., M.A., F.R.S., Prof. of Geom.; Hayes, E. H., M.A.; Henderson, H. L., O.B.E., M.A., Dean, Dean of Arts, \* *Classics*; Huxley, J. S., M.A., ‡ *Zool.*; Joachim, H. H., M.A., Prof. of Logic; Joseph, H. W. B., M.A., \* *Philos. and Classics*; Legg, L. G. W., M.A., \* *Modern Hist.*; Lightfoot, R. H., M.A., Junr. Bursar, \* Dean of Div.; Margoliouth, D. S., M.A., D.Litt., Prof. of Arabic; Matheson, P. E., M.B.E., M.A., \* *Anc. Hist. and Classics*; Moyle, J. B., D.C.L., Senr. Bursar; Myres, J. L., O.B.E., M.A., Libn., Prof. of Anc. Hist.; Ogg, D., M.A., \* *Modern Hist.*; Poole, E. G. C., M.A., D.Phil. \* *Maths.*; Prickard, A. O., M.A.; Radcliffe, G. R. Y., M.A., \* *Law*; Schuster, E. H. J., M.A., D.Sc.; Smith, A. H., C.B.E., M.A., \* *Litt. Hum.*, Sub-Warden; Townsend, J. S. E., M.A., F.R.S., Prof. of Physics; Turner, H. H., M.A., D.Sc., F.R.S., Prof. of Astron.; Walden, A. F., M.A., \* *Chem.*

Other Lectrs.: Priestley, J. G., D.M., *Physiol.*; Woodward, E. L., M.A., *Mod. Hist.*

ORIEL COLLEGE. Founded 1326. Provost—L. R. Phelps, M.A.

\* Tutor.

‡ Lecturer.

Fellows : Burney, C. F., M.A., D.Litt., Prof. of Interpret. of Holy Script. ; Clark, G. N., M.A., ‡ *Modern Hist.* ; Craigie, W. A., M.A., Prof. of Anglo-Saxon ; Firth, Sir C. H., M.A., Prof. of Mod. Hist. ; Graham, E., M.A., Dean † ; Hall, F. H., M.A. ; Hammick, D. L., M.A., ‡ *Nat. Sc.* ; Lewis, W. J., M.A., F.R.S. ; Lyon, P. C., M.A., C.S.I., Treasurer ; Price, L. L. F. R., M.A. ; Richards, G. C., B.D., M.A., \* ; Ross, W. D., O.B.E., M.A., \* Librarian ; Simpson, P., M.A., ‡ *Engl. Lit.* ; Tod, M. N., O.B.E., M.A.\*

Other Lectrs. : Berthon, H. E., M.A., *French* ; Dibblee, G. B., M.A., *Pol. Econ.* ; Franklin, K. J., B.A., *Nat. Sc.* ; Montague, F. C., M.A., *Modern Hist.* ; Rogers, L. J., B.Mus., M.A., *Maths.* ; Stallybrass, W. T. S., O.B.E., M.A., *Law*.

PEMBROKE COLLEGE. Founded 1624. Master—F. H. Dudden, D.D.

Fellows : Burrowes, A. B., B.A., Dean, ‡ *Div. and Classics* ; Collingwood, R. G., M.A., \* ; Drake, H. L., M.A., \* *Classics* ; Leudesdorf, C., M.A., Vice-regent ; Ramsden, W., D.M. ; Salt, L. E., M.A., Bursar ; Wood, G., M.A., Librarian.

Other Lectrs. : Berthon, H. E., M.A. Wad., *French* ; Brett-Smith, H. F. B., M.A., *Engl.* ; Chaundy, T. W., M.A. Ch. Ch., *Maths.* ; George, H. J., M.A. Jes., *Nat. Sc.* ; Williams, N. P., B.D., M.A. Exe., *Theol.*

THE QUEEN'S COLLEGE. Founded 1340. Provost—J. R. Magrath, D.D.

Fellows : Allen, T. W., M.A., Sr. Tutor, Librarian ; Armstrong, E., M.A., *Modern Hist.* ; Bell, J., M.A., \* ‡ *Classics* ; Berrisford, E. A., M.A., Chaplain, *Nat. Science* ; Chattaway, F. D., M.A., Ph.D., F.R.S., \* ‡ *Chem.* ; Cronshaw, G. B., M.A., Bursar ; Elton, G., M.A., Dean, ‡ *Modern Hist.* ; Grenfell, B. P., M.A., D.Litt. ; Hodgkin, R. H., M.A., \* *Mod. Hist.* ; Hunt, A. S., M.A., D.Litt., Prof. of *Papyrol.* ; Morice, F. D., M.A. ; Paton, H. J., M.A., \* ‡ *Philos.* ; Sayce, A. H., M.A., Hon. D.Litt. ; Streeter, B. H., M.A., ‡ *Theol.* ; Thompson, C. H., M.A., \* *Maths.* ; Walker, E. M., M.A., Pro-Provost, ‡ *Ancient Hist.*

Other Lectrs. : Brett-Smith, H. F. B., M.A., *English* ; Douglas, C. G., C.M.G., B.Sc., D.M., *Physiol.* ; Forbes, N., M.A., *Russian* ; Hazel, A. E. W., C.B.E., B.C.L., M.A., *Law*.

Sr. JOHN'S COLLEGE. Founded 1555. President—H. A. James, D.D.

Fellows : Appleby, M. P., M.B.E., M.A., B.Sc., Asst. Tutor, ‡ *Chem.* ; Bidder, H. J., M.A., B.D. ; Burney, C. F., D.Litt., Prof. of Interp. of Holy Scrip. ; Costin, W. C., M.A., Asst. Tutor, Jr. Dean of Arts ; Dermer, E. C., M.A., B.D. ; Douglas, C. G., C.M.G., B.Sc., D.M., ‡ *Nat. Science*, Asst. Tutor ; Hall, F. W., M.A., \* ‡ *Classics* ; Hart-Synnot, R. V. O., O.B.E., M.A., Bursar ; Hutton, Very Rev. W. H., D.D. ; Last, H. M., M.A., ‡ *Anc. Hist.* ; Poole, A. L., M.A., ‡ *Modern Hist.*, Asst. Tutor ; Powell, J. U., M.A., Senr. Tutor, ‡ *Classics* ; Pullan, L., D.D., \* ‡ *Theol.* ; Somerville, W., D.Sc., M.A., Prof. of Rural Econ. ; Stevenson, W. H., M.A., Vice-Pres., Sr. Dean of Arts, Libn. ; Stocks, J. L., M.A., \* ‡ *Philos.* ; Troup, R. S., C.I.E., M.A., Prof. of Forestry.

Other Lectrs. : Berthon, H. E., M.V.O., M.A. Wad., *French* ; Hughes, A. M. D'Urban, M.A., *English*.

TRINITY COLLEGE. Founded 1554-1555. President—H. E. D. Blakiston, D.D. (acting Estates Bursar).

Fellows : Burroughs, E. A., M.A., Chaplain ; Green, M. H., M.A. ; Higham, T. F., M.A., Dean, ‡ *Classics* ; Hinshelwood, C. N., B.A., ‡ *Chem.* ; Kirk, K. E., B.D., M.A., ‡ *Theol.* ; Landon, P. A., M.A., ‡ *Law*, Jr. Bursar, Vice-Pres. ; Liddell, E. G. T., B.M., M.A. ; Ogilvie, F. W., M.A., ‡ *Econ.* ; Patterson, M. W., M.A., \* ‡ *Modern Hist.* ; Prichard, H. A., M.A., \* ‡ *Philos.* ; Weaver, J. R. H., M.A., \* ‡ *Modern Hist.*, Librarian.

\* Tutor.

‡ Lecturer.

UNIVERSITY COLLEGE. Founded 1249. Master—R. W. Macan, M.A., D.Litt.

Fellows : Allen, C. K., M.A., Praelector in *Jurispr.*, Jr. Dean ; Bourdillon, R. B., M.A., Research Fellow ; Bowen, E. J., B.A., Praelector in *Chem.* ; Carritt, E. F., M.A., Praelector in *Philos.*, Librarian ; Emmet, C. W., B.D., † *Theol.*, Dean ; Farquharson, Lt.-Col. A. S. L., C.B.E., M.A., \* *Litt. Hum.*, Sr. Tutor, Dean of Degrees ; Keir, D. L., B.A., Praelector in *Mod. Hist.* ; Leys, K. K. M., M.A., *Modern Hist.* \* ; Poynton, A. B., M.A., Praelector in *Classics*, Bursar ; Sollas, W. J., M.A., F.R.S., Prof. of Geology ; Stevenson, G. H., M.A., Praelector in *Anc. Hist.* ; Walker, E. W. A., D.M., D.Sc., \* Praelector in *Nat. Philos.*

Other Lectrs. and Asst. Lectrs. : Bosanquet, C. H., M.A., *Physics* ; Carlyle, A. J., M.A., D.Litt., *Pol. Philos.* and *Econ.* ; Douglas, J. A., B.Sc., M.A. *Kebl.*, *Geol.* ; Ewert, A., M.A., *French* ; Johnson, A. H., M.A., *Modern Hist.* ; Morrison, C. G. T., M.A., *Agric.*, etc. ; Thomson, C. H., M.A. *Qu.*, *Maths.* ; Wilson, F. P., B.Litt., *Engl. Lit.*

WADHAM COLLEGE. Founded 1610. Warden—J. Wells, M.A.

Fellows : Bowra, C. M., B.A., † *Classics*, Dean ; Brabant, F. H., M.A., † *Philos.* ; Dixey, F. A., D.M., F.R.S., Wills Medical Fellow, † *Physiol.*, etc., Sub-Warden and Bursar ; Lennard, R. V., M.A., Librarian, \* *Hist.* ; Lindemann, F. A., M.A., F.R.S., Prof. of Expl. Philos. ; Stenning, J. F., C.B., C.B.E., M.A., Senr. Tutor, † *Div.*, *Hebrew* ; Wade-Gery, H. T., M.A., \* *Classics*, *Anc. Hist.*

WORCESTER COLLEGE. Founded 1714. Provost and Senr. Bursar—F. J. Lys, M.A.

Fellows : Bryan-Brown, A. N., B.A., † *Classics* ; Narborough, F. D. V., M.A., † *Theol.* ; Pickard-Cambridge, W. A., M.A., \* † *Classics* ; Roberts, P. E., M.A., Vice-Provost, \* † *Mod. Hist.* ; Somerset, H. V. F., B.A., † *Mod. Hist.*, Junr. Bursar ; Wilkinson, C. H., M.A., † *Engl. Lit.*, Dean, Librarian.

Other Lectrs. : Marriott, J. A. R., M.A., *Mod. Hist.* ; Rogers, L. J., B.Mus., M.A., *Maths.*

ST. EDMUND HALL. Founded 1269. Principal—G. B. Allen, M.A., B.D.

Staff : Bell, J., M.A. *Qu.*, † *Classics* ; Brewis, G. R., M.A., Senr. Tutor ; Chattaway, F. D., M.A., F.R.S., † *Chem.* ; Emden, A. B., M.A., Vice-Principal, \* *Modern Hist.* ; Ridley, M. R., M.A., † *Engl.* ; Simpson, D. C., M.A., B.D., † *Theol.*, *Hebrew* ; Thompson, C. H., M.A., † *Maths.* ; Waters, E. G. R., M.A., † *French* ; \* Fletcher, R. F. W., B.A., Chaplain.

KEBLE COLLEGE. Founded 1870. Warden—B. J. Kidd, D.D.

Other Tutors : Jackson, W. H., M.A., D.Sc., *Nat. Science* ; Jolliffe, J. E. A., M.A., *Hist.* ; Owen, A. S., M.A., *Classics* ; Parker, H. M. D., M.A., *Litt. Hum.* ; Reade, W. H. V., M.A., Dean, *Litt. Hum.* ; Rice-Oxley, L., M.A., *Hist.* ; Simpson, D. C., B.D., *Theol.* ; Gretton, R. H., M.A. Magd., *Hist.*

Lectr. : Norton, D. E., M.A.

NON-COLLEGIATE STUDENTS. Censor—J. B. Baker, M.A., Non-Coll.

Tutors and Lecturers : The Censor, *Modern Hist.* ; Carlyle, A. J., D.Litt., Univ., *Engl.* ; Chattaway, F. D., M.A. *Qu.*, F.R.S., *Chem.* ; Cheshire, G. C., M.A., B.C.L. Exe., *Jurispr.* ; Dixey, F. A., D.M. Wad., F.R.S., *Physiol.* ; Garabedian, D., M.A., *French* ; George, H. J., M.A. *Jes.*, *Chem.* ; Graham, E., M.A. Oriel, *Theol.* ; Jeffery, R. W., M.A. B.N.C., *Modern Hist.* ; Kendrew, W. G., M.A., Non-Coll. ; Nicholls, A. W., B.A., *Mod. Hist.* ; Richards, G. C., B.D., M.A. Oriel, *Classics* ; Thompson, C. H., M.A. *Qu.*, *Maths.* ; Underhill, G. E., M.A. Magd., *Litt. Hum.*

\* Tutor.

† Lecturer.

CAMPION HALL. Master—J. H. Keane, M.A.

ST. BENET'S HALL. Master—P. J. McCann, M.A.

### *Recognized Societies.*

LADY MARGARET HALL, founded in 1878 and opened in 1879; constituted under a Deed of Trust in 1893, incorporated 1913. *Principal*—Miss L. Grier, M.A. *Tutors*: Miss E. M. Jamison, M.A., *Vice-Principal*; Miss J. Spens, M.A., D.Lit.; Miss H. C. Deneke, M.A.; Miss M. G. Skipworth, M.A., *Librarian*; Miss Coate, M.A.; Miss Ramsay, M.A. Aberd.; Miss Chilcott, M.A. Lond. *Bursar and House Treasurer*—Miss E. A. Musson. *Hall Secretary*—Miss C. Anson, B.A.

SOMERVILLE COLLEGE, founded as Somerville Hall in 1879. In 1881 it was incorporated under the Companies Acts (1862–80). *Principal*—Miss E. Penrose, M.A. *Vice-Principal*—Hon. Alice Bruce, M.A. *Tutors*—Mildred Pope, M.A.; Hilda Lorimer, M.A.; Helen Darbishire, M.A.; Doris Rhodes; Jane Kirkaldy, M.A.; Maude Clarke, M.A.; Charlotte Young, B.A. *Lady Carlisle Research Fellow*—Mary Porter, B.Sc.; *Mary Somerville Research Fellow*—Evelyn E. S. Procter, B.A. *Librarian*—Vera Farnell, M.A. *Bursar*—Beatrice Stonedale.

ST. HUGH'S COLLEGE, founded as St. Hugh's Hall, in 1886, was incorporated as St. Hugh's Coll. in 1911. *Principal*—Miss E. F. Jourdain, M.A. *Resident Tutors*—Cecilia M. Ady, M.A.; Margaret R. B. Shaw, M.A.; Edith E. Wardale, M.A.; Jane W. Kirkaldy, M.A.; Jocelyn Toynbee; Gladys Scott-Thompson; Dorothy Everett. *House Bursar*—Ruth Metherell. *Librarian*—Winifred M. Mammatt. *Secretary*—A. M. Phyllis Mills, B.A.

The College is conducted according to the principles of the Church of England.

ST. HILDA'S HALL, founded in 1893 by Miss Dorothea Beale, sometime *Principal* of Cheltenham Ladies' Coll. Admission (minimum age, 18) ordinarily by examn. Students are expected to read for an Honour Degree, B.Litt., B.Sc., or Univ. Dipl. *Principal*—Miss W. H. Moberly, M.A. *Tutors*: Miss Levett, M.A., *Vice-Principal*, Modern Hist.; Miss C. M. Craven, M.A., Asst. Hist. Tutor; Miss E. Rooke, M.A., English; Miss Keith, Classics; Miss Skipworth, M.A., French; Miss Chesney, B.A., Asst. in French and Librarian. *House Bursar*—Miss Winslow. *Secy.*—Miss J. C. Thornton, B.A.

SOCIETY OF OXFORD HOME-STUDENTS, founded in 1879. The Governing Body is the Univ. Delegacy of Home-Students. *Principal*—Miss Burrows, M.A., 1 Jowett Walk, Oxford. There is a staff of 12 Tutors.

The students reside in their own homes or with relatives or in private families in Oxford or, occasionally, in lodgings.

*St. Frideswide's, Cherwell Edge*, is a hostel maintained by the Roman Catholic Community of the Holy Child Jesus, and licensed by the Univ. for the reception of Home-Students, religious and secular.

## GENERAL INFORMATION

CONSTITUTION. *Convocation*, consisting of all Masters of Arts and Doctors of the Faculties of Divinity, Civil Law, and Medicine who have their names on the Univ. books, has the power of confirming or rejecting (but not of amending) Statutes which have passed Congregation. It also transacts much of the ordinary business of the Univ. by means of "Decrees." It confers honorary degrees and also degrees granted by Decree or Diploma.

It sanctions petitions to Parliament, authorizes the affixing of the Univ. seal when necessary, and its members elect the Univ. representatives in Parliament. But no proposals can be made to it which have not been sanctioned by the *Hebdomadal Council*, which consists of the Chancellor, Vice-Chancellor, immediate ex-Vice-Chancellor (for a certain period after the expiration of his term of office), and Proctors and 18 other members (Heads of Houses, Professors, etc.) elected by Congregation. This Council takes the initiative in all the legislation of the Univ., except what is proposed by the General Board of the Faculties. The *Congregation of the University* consists mainly of the teaching and administrative clements in the Univ. and Colleges. It has the power of adopting, rejecting, or amending legislation submitted by the Hebdomadal Council previously to its submission to Convocation. The *General Board of the Faculties* has power, after consultation with the Board of the Faculty concerned, to draft and send to Congregation through the Hebdomadal Council any proposals on matters connected with studies and exams. which require to be dealt with by Statute.

The Chancellor, elected for life by Convocation, is a non-resident Officer. The executive power is chiefly in the hands of his Deputy, the Vice-Chancellor, who is annually nominated by him from among the Heads of Colleges, and the Proctors annually elected by the Colleges and Halls in rotation.

The Colleges are corporate bodies distinct from the Univ. They are not even, at all events directly, subject to regulations made by the Univ.; they manage their own property and elect their own Officers, and the Proctors have no power within their walls. In many matters, however, they and the Univ. recognize each other's regulations, and an intimate relation exists between them; the great majority of the members of the Univ. belong to the Colleges, and all who belong to the various Colleges are at the same time members of the Univ. Teaching is given partly by Univ. Profs., Readers, and Lectrs., partly by the more numerous body of College Tutors and Lectrs. Altogether the teaching staff numbers approximately 300.

**FACULTIES.** Theology, Law, Medicine, Literæ humaniores, Modern History, Mediæval and Modern Languages, Oriental Languages, Natural Science. For Music, for Agriculture and Forestry, and for Philosophy, Politics, and Economics, there are Boards of Studies.

**ADMISSION** to the Univ. ("Matriculation") is without respect of sex, birth, age, nationality, or creed, and follows upon admission to a College or Hall or to the Society of Non-Coll. Students, or Society of Home-Students. No one can become a member of the Univ. unless he first becomes a member of one of these Societies. An application for admission must therefore be addressed, not to any officer of the Univ., but to the proper officer\* of the Society to which admission is desired; it should be made, if possible, a year or more before residence is contemplated, especially if rooms within the College walls are desired.

Although the Univ. itself holds no Entrance examn., the Colls. and Halls and the Society of Non-Coll. Students require certain qualifications of character and intellectual attainment in which the passing of *Responsions* or some equivalent examn. is ordinarily included.

As regards *Colonial and Foreign students*, see Appendix XXIII.; an Adviser is attached to the Univ. Registry.

\* Balliol—The Tutor for Admissions; Qu.—The Pro-Provost; Non-Coll.—The Censor, Non-Collegiate Buildings; in other cases—The head of the Society (v. *supra*).



INCORPORATION. Members of the Univs. of Cambridge and Dublin can be, under certain conditions, "incorporated" into this Univ., *i.e.* admitted to the same status and degree which they hold in their own Univ. Notice of intention to incorporate as an undergraduate must be sent to the Registrar through the Head of a College or the Censor of Non-Coll. Students. The privileges of incorporation as a graduate are limited to B.A., M.A., Litt.D., B.D., D.D., and D.Sc. of those Univs. Any applicant for incorporation must have kept by residence at his Univ. before taking his degree the same number of terms that he would have been required to keep at Oxford for the corresponding degree. While an undergraduate is allowed to incorporate as a matter of course, a graduate must first satisfy the Hebdomadal Council that there are adequate reasons.

ADMISSION TO ADVANCED STANDING OF STUDENTS FROM OTHER INSTITUTIONS: "JUNIOR" AND "SENIOR" STUDENTS. I. *Universities other than Indian.*—(a) Any student who shall have pursued at his Univ. a prescribed course extending over 2 years may be admitted as a "Junior Student" provided that his course and the standard attained by him in any exams. proper to it shall have been approved. No course will be approved which does not include the study of 2 languages other than English, of which languages one must be either Latin or Greek. (b) Any person who has obtained a degree at his Univ., Degree and Univ. having been approved, may be admitted as a "Senior Student," provided that he shall have pursued at that Univ., or, if approved, at more than one Univ., a course extending over 3 years.

II. *Indian Universities.*—(a) Any student who shall have pursued at his Univ. a prescribed course extending over 2 years, and obtained the Degree of B.A. or B.Sc., may be admitted as a "Junior Student," provided that Degree and Univ. have been approved. No Degree will be approved which does not include the study of English and in addition of 2 of the following languages, Latin, Greek, French, German, Sanskrit, Arabic, Persian, Pali, Classical Chinese, of which 2 either Latin or Greek or French or German must be one. (b) Any student who shall have pursued at his Univ. a prescribed course extending over 3 years and obtained a Degree with 1st or 2nd Class Honours, may be admitted as a "Senior Student," provided that Degree and Univ. have been approved.

III. A *Junior Student*: (a) may reckon his 1st term as his 4th; (b) is not required to pass Responsions; (c) is entitled to supplicate for Degree of B.A. after having resided 6 terms and passed the 1st Public Examn. and either (1) obtained a place in the Class List of an Honour School of the 2nd Public Examn. or been allowed "ægrotat"; or (2) satisfied the Examiner in the 2nd Public Examn. in the Final Honour School of Nat. Sc. in Chem., Pt. I., or in the Final School of Agric. and Forestry; or (3) obtained Honours in the 1st Public Examn., and subsequently passed the 2nd Public Examn.; or (4) if disqualified by standing from obtaining such Honours, shown such merit as would otherwise have entitled him to a place on the Class List; provided that he shall have satisfied the Examiners in Holy Scripture or in a book offered instead thereof.

A *Senior Student*: (a) may reckon his 1st term as his 4th; (b) is not required to pass Responsions or any part of the 1st Public Examn. or any Preliminary or Previous Examn. of the 2nd Public Examn.; (c) is entitled to supplicate for the Degree of B.A. after having kept statutable residence for 6 terms, and having either (i.)—as above—(c) (1); or (ii.)—as above—(c) (4).

No Junior or Senior Student will be entitled to supplicate for the Degree of B.A. except as above.

IV. *Until the first day of Michaelmas Term, 1923, however, any person*

who under the rules in force on October 10, 1921, was entitled to claim the status and privileges of a Colonial, Indian, or Foreign Junior Student or of an Affiliated Junior Student from a Univ. within the U.K. may be permitted to do so.

Members of the following AFFILIATED COLLEGES may claim the status of Affiliated Junior student if they have pursued a 2 yrs.' course of study at their Coll. and taken Honours in an examn. thereon: St. David's Coll., Lampeter (3 yrs.' course with Honours may give admission to status of Senr. student); Univ. Colls., Nottingham, Reading, Southampton, Exeter; Exeter Diocesan Training Coll. The privileges of an Affiliated Junior Student are similar to but not identically the same as those of a "Junior Student."

**TERMS.** The Academical year, which begins in Oct. and ends in June, consists of 3 terms, each of some 8 weeks. Residence within the walls of a College or Hall, or in licensed lodgings,\* during a certain number of terms, usually 9, and never less than 6, is a condition of admission to any degree except in Music. Full terms begin Jan. 22, April 30, and Oct. 15, 1923.

**DEGREES.** B.A., M.A., B.Litt., D.Litt.; B.Sc., D.Sc.; D.Phil.; B.D., D.D.; B.C.L., D.C.L.; B.M., B.Ch., D.M., M.Ch.; B.Mus., D.Mus.

The degrees which are open to graduate students of other Univs. who are qualified for matricn. at Oxford are those of B.Litt., B.Sc., D.Phil., B.C.L., and B.D.

**ARTS.** Examns. in Arts, more usually called "Schools," are sharply divided into Pass and Honour examns.; in the former there is but one standard, in the latter successful candidates are distributed into 3 or 4 classes. No one is admitted to a place in the Class Lists who has exceeded a certain number of terms reckoned from Matricn. No conditions of residence are attached by the Univ. to either Pass or Honour examns.; it is simply for the attainment of the degree of B.A. that residence is obligatory. Every Coll. and Hall, however, as well as the Delegacy of Non-Coll. Students, has its own rules with regard to both residence and the entry for examns. A candidate for the degree of B.A. must (1) reside at the Univ. as a matriculated member during 9 terms, unless he is privileged as a member of another Univ. or as a "Service" Student; (2) pass or obtain Honours in the following examns., namely:

(a) *Responsions.* The examn. may be passed before matricn., and most Colls. require it or an equivalent examn. to be passed before residence is begun. Names of candidates who have not been matriculated must be entered through an officer of the Society to which they intend to belong. The examn. includes 3 groups: I. (a) Latin, (b) Greek; II. (a) English, (b) French, (c) German; III. (a) Maths., (b) Nat. Sc., (c) Maths. and Nat. Sc. In order to be deemed to have passed Responsions it is necessary to have passed either in both subjects of Group I. and in the first 2 subjects in Group III., or else in one subject at least in each group, and in 4 subjects in all, including two languages other than English.

(b) *The 1st Public Examn.* This consists of (1) Examn. in Holy Scripture, (2) Honour Classical Moderations, (3) Hon. Math. Modns., (4) Pass Modns., (5) Prelim. Jurisprudence, (6) Prelim. Mod. Hist., (7) Prelim. N.Sc., (8) Prelim. Agr. and Forestry. In order to pass the Examn. a candidate must pass in (1) and in one of the other subjects.

(c) *The 2nd Public Examn.* This consists of an examn. for Candidates who do not seek Honours, including a Pass School and a School of Agriculture

\* In special circumstances leave to reside in a house which has not been licensed may sometimes be obtained.

and Forestry; and a Final Examn. in 10 Honour Schools, namely: Literæ Humaniores (Philos. and Ancient Hist.); Maths.; Nat. Science (Phys., Chem., Physiol., Zool., Bot., Geol., Astron., or Engin.); Jurispr.; Mod. Hist.; Theol.; Oriental Studies (Sanskrit, Arabic, Hebrew, Persian, or Egyptian); Engl. Lang. and Lit.; Mod. Langs. (French, Ger., Ital., Span., Russ., or Mediæval and Mod. Greek); Philos., Politics, and Economics.

Under certain conditions members of other Univs. and seconded officers not under 21 years of age who have held for not less than 3 years a permanent Commission in H.M. Navy, Army, or Air Force, and been admitted to the status of "Service Student," may obtain exemption from Responsions and, under further conditions, from the 1st Public examn., as well as a remission of 3 terms of the necessary residence (*v. supra*, p. 171). Natives of Asia, Egypt, or the Sudan, born of non-European parents, can apply for permission to offer a substitute for Latin or Greek in Responsions and the 1st Public examn.

The DEGREES B.LITT. AND B.Sc., instituted in 1895 in order to encourage special study and research, are granted upon the satisfactory completion of an approved course of special study or research pursued under supervision and for the most part at Oxford. Application to enter upon such a course may be made by any person over the age of 21 years who produces sufficient evidence of his ability and (1) is a member of the Univ. who has passed the examns. for the degree of B.A., or (2) is a graduate in Arts, Letters, or Science of a Univ. within the U.K., or (3) can satisfy the Education Committee that he has received a good general education. Applications must in all cases be made to the Asst. Registrar through an officer of the Society to which the candidate belongs or desires to belong. Residence as a member of the Univ. for 6 terms is a necessary condition for either degree.

Of the same nature but of a higher standard is the degree of DOCTOR OF PHILOSOPHY instituted in 1918 (*v. p.* 15).

The higher degrees, D.LITT. AND D.Sc., instituted in 1900, are awarded for published work of sufficient merit.

**THEOLOGY.** The B.D. degree is open to candidates of over 26 yrs. of age who have passed a Qualifying examn. in Christian Theology, pursued a course of study therein extending over 6 terms, resided for 6 terms, and submitted a thesis of sufficient merit in some branch of the subject.

The degree of D.D. is open to those who have been admitted to the degree of B.D. subject to certain conditions of standing, provided they have submitted a thesis, or published work, of sufficient merit in some branch of Christian Theology.

**LAW.** The examn. for the B.C.L. degree is open either (1) to B.A.'s of the Univ. or (2) under certain conditions (including residence for 6 terms) to graduates in Arts, Philos., Science, or Law of other Univs. The subjects are Jurispr., Roman, Engl., Roman-Dutch, and Internat. Law.

**MEDICINE.** The B.M. degree is open only to B.A.'s of the Univ. who have passed certain examns. in Med. and Nat. Science. The total period of study for the degree (including the scientific subjects studied in the Arts course) is generally about 7 years, of which between 2 and 3 are usually spent in London in preparation for the more strictly professional subjects of the 2nd B.M. examn. The M.Ch. degree is open to candidates who have passed all the examns. for the B.M. and B.Ch., and either are members of the Surgical staff of a recognized hospital or have acted in such a hospital as Dresser or House Surgeon for 6 mos. A candidate for the D.M. must be a B.M., and have entered

on the 30th term from matricn. and had his name on the books of some Coll. or Hall or on the Register of Non-Coll. Students for 20 terms.

**MUSIC.** The degree of B.Mus. is open to candidates who *either* (a) have been admitted to the degree of B.A. *or* (b) have (1) passed Responsions or an equivalent or a special Prelim. examn. for students of music, (2) satisfied the examiners in English or 1 of 3 language subjects in the Final Pass School, and (3) pursued either at the Univ. or at some approved institn. a course of musical study, approved by the Board of Studies for Music, extending over at least 2 yearly courses. All candidates must also pass 3 examns. in Music (the subject of one of which is the composition of a Musical Exercise) under conditions laid down by Statute. There is no residential qualification for the degree of B.Mus., but the conditions of admission to the various examns. make it necessary that the candidate's name should be on the books of his Coll. or Hall or of the Society of Non-Coll. Students for at least 9 terms. A B.Mus. may qualify for the degree of D.Mus. by submitting a musical composition for approval and passing a further examn. in Music, but cannot submit a composition until the 9th term after his admission to the Baccalaureate.

**DIPLOMAS.** Most of these are open to persons who are not members of the Univ. Minimum courses and addresses of Secretaries from whom particulars can be obtained :

Geography, 1 yr., Reader in Geog., School of Geog., Mansfield Rd.

Education, 1 yr. (or Vacation course, v. p. 175) Director of Training, 15 Norham Gardens.

Economics and Polit. Sc., Dr. A. J. Carlyle, 29 Holywell St.

Anthropology, 1 yr., Reader in Social A., Acland House.

Forestry, 2 yrs., Secy., School of F. Partial exemption from the examn. may be granted to students who have passed at a Univ. in any part of the British dominions or in any of the Native States of India an examn. approved by the Delegates as equivalent.

Rural Economy, 2 yrs., Secy., School of R.E.

Classical Archæology, 1 yr., Secy. to Committee on C.A., Ashmolean Museum.

Theology, 1 yr., Asst. Registrar.

Open to Registered Medical Practitioners : Public Health and (also open to approved Bachelors and Doctors of Med. of Univs. outside the U.K.) Ophthalmology, Asst. Registrar.

*Certificates* : Surveying or General and Regional Geog., 2 terms, Reader in Geog. ; Physical or Cultural Anthropology, 2 terms, Reader in Social A., Acland House ; Modern History, 1 yr., Asst. Registrar ; French or German, Asst. Registrar.

The following have been approved as Societies for higher study at Oxford, the members of which may have their names entered in the Univ. Register of Diploma students although they are not members of the Univ. : *Ruskin College* and (women students only) *Cherwell Hall*.

**COMMISSIONS IN H.M. FORCES**, v. Appendix I. Candidates must have resided for 3 yrs. at the Univ. and been efficient members of the Univ. O.T.C. Office of the Secy. to the Delegacy for Military Instruction—20 St. Michael's St.

**INDIAN CIVIL SERVICE.** Studies of selected candidates are superintended by a Delegacy.

The Department for the **TRAINING OF TEACHERS** (address—15 Norham Gardens), established in 1919, is under the general direction of a Delegacy. Staff : Director, F. J. R. Hendy, M.A. ; the Univ. Reader in Educn. ; Tutor to Women Students and Principal of the Women's Hostel ; and an Asst.

Lectr. and Tutor. For the Univ. Dipl. in Educn. there is a 1 yr. post-grad. course, theoretical and practical. Undergraduates are admissible on certain conditions. Students are also accepted for a 4 yrs.' course (v. Appendix XIX.).

A *vacation course* of 4 weeks (fee £7 : 10s.) is held annually in August, open without restriction to men and women. Students of this course who are graduates and who are teachers with 7 yrs.' experience may obtain the Univ. Diploma without further residence.

**DELEGACY FOR ORIENTAL STUDENTS.** The Secy., Sir S. M. Burrows, C.I.E., M.A., Indian Institute, is prepared to advise Indian and other Oriental students.

In 1910 a Delegacy for WOMEN STUDENTS was constituted, and provision made for recognition by the Univ. of Societies for their reception for academical study, students on the books of such Recognized Societies being accorded a privileged status. Under the provisions of a Statute approved by Convocation on May 11, 1920, which came into force on Oct. 7, 1920, women may be matriculated and admitted to degrees in the Univ. Previous to matricn. a woman must have been admitted as a member of one of the 5 Societies of Women Students. A woman may be admitted to *Responsions* before matricn. provided her name is sent in to the Asst. Registrar by the Head or a Tutor of a Soc. to which she *bona fide* desires admission. Women members of the Univ. are admitted to all degrees (except B.D. and D.D.) under the same conditions as those prescribed for men as regards standing, examns., course of study, exercises, and fees, and under analogous conditions as regards residence. A Women Students' Property Committee administers all property vested in the Univ. for the benefit of women members of the Univ. generally, and in particular the Nettleship Library and Bertha Johnson Loan Fund. The Delegacy for Women Students has been abolished.

**SCHOLARSHIPS.** College Entrance scholarships are very numerous and valuable. The Univ. scholarships are usually open only to members of specified standing. Of those open to graduates, 16, of the aggregate value of £1130 p.a., are for Engl., Greek, and Latin; 1 (£100) is for Ment. and Mor. Philos.; 2 (£80) for Maths.; 8 (£1340) for Med. and Nat. Science; 4 (£440) for Law; 3 (£300) for Theol.; 13 (£760) for Oriental Studies. There are several College Research Fellowships tenable by persons distinguished in Science or Lit. (who may be elected without examn.) on condition of prosecuting some definite work.

The General Board of Faculties has power to provide studentships for advanced study and research; and there are certain funds, such as the Craven and Ireland, from which grants for the furtherance of particular studies may be made.

The Rhodes Scholarships were founded in 1902 under the will of the late Cecil John Rhodes. The value of each Scholarship is £300 a year, with an additional bonus for the present of £50 a year, and they are tenable at Oxford for 3 years, subject to approval from year to year by his College of the Scholar's progress and conduct. The conditions of the competition in each country or community are fixed from time to time by the Trustees.

In his will, Mr. Rhodes expressed the wish that "in the election of a student to a Scholarship, regard shall be had to (1) his literary and scholastic attainments; (2) his fondness for and success in manly outdoor sports, such as cricket, football, and the like; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship; and (4) his exhibition during schooldays of moral force of character, and of instincts to lead and to take an interest in his schoolmates."

*The Dominions and Colonies.* An annual Scholarship is assigned to each Province of the Dominion of Canada ; to each State of the Australian Commonwealth ; to the Dominion of New Zealand ; and in South Africa to the Province of Natal, the Transvaal, the Orange Free State, the Cape Province, the S.A. College School in Cape Town, the Diocesan College School of Rondebosch, the Boys' High School, Stellenbosch, and the St. Andrew's College School at Grahamstown, in alternate years to the towns of Kimberley and Port Elizabeth, and not more than three annually to Rhodesia. The Colonies of Jamaica, Newfoundland, and Bermuda have each an annual Scholarship. A single Scholarship was for the first time allotted to the Island of Malta in 1920.

In founding these Scholarships, Mr. Rhodes stated that he did so because he believed that the education of young Colonists at one of our residential universities will "broaden their view," "instruct them in life and manners," and "instil into their minds the advantage to the Colonies as well as to the United Kingdom of the retention of the unity of the Empire."

*United States of America.* Two Scholarships are assigned to each State. Since the Scholarship is tenable for 3 years, there will be 1 year out of every 3 in which there will be no election. In each of the other 2 years 1 scholarship will be filled up if a suitable candidate offers. The reason given by Mr. Rhodes for founding the American Scholarships is his "desire to encourage and foster an appreciation of the advantages which I implicitly believe will result from the union of the English-speaking people throughout the world, and to encourage in the students from the U.S. . . . an attachment to the country from which they have sprung but without I hope withdrawing them or their sympathies from the land of their adoption and birth."

*General.* Provision is now made under the Trust for the continuous residence at Oxford of 190 scholars. Candidates must be between 19 and 25 years of age and unmarried. They must be citizens of the country from which they come—usually with 5 years' domicile ; and must have 2 years' standing at a regular degree-granting College or Univ., except in a few small communities which have no such institution. Detailed information for each country may be obtained from the offices of the Trust, Seymour House, Waterloo Place, London, S.W.1. Constable, London, and the Houghton Mifflin Co., Boston, publish a volume on the Scholarships, by the Organizing Secretary, see also p. 180—Rhodes Scholars.

*Secretary to the Rhodes Trustees*—Geoffrey Dawson, Esq., Seymour House, Waterloo Place, London, S.W.1. Local Secretaries : Oxford—F. J. Wylie, Esq., 9 South Parks Road, Oxford ; U.S.A.—President Frank Aydelotte, Swarthmore College, Swarthmore, Pa. ; Canada—J. M. Macdonnell, Esq., National Trust Co., Ltd., 18-22 King St. East, Toronto ; Australia—J. C. V. Behan, Esq., Warden's Lodge, Trinity College, Melbourne ; S. Africa—P. T. Lewis, Esq., S. African Chambers, St. George's St., Cape Town.

The APPOINTMENTS COMMITTEE, together with its Consultative Committee, contains representatives of every College. It receives notice of (1) scholastic appointments ; (2) Government appointments ; (3) openings in Banking, Industrial and Commercial firms ; (4) miscellaneous posts. The Secy. is R. Truslove, M.A., Acland House, Broad St. Telegraphic address—Appointments, Oxford ; Telephone, 225 Oxford. Brief information about posts in the *Public Services* suitable for men who have taken their degree at the Univ. is given in Ch. XV. of the Ox. Univ. *Handbook* (v. "Publications").

**LIBRARIES AND MUSEUMS.** The *Bodleian Library*, founded by Sir Thomas Bodley in 1602, which is also the general library of the Univ., contains over 1,000,000 vols. (representing more than 2,000,000 separate literary pieces) and

40,000 MSS. Persons, other than graduates of the Univ., are admitted on presenting a recommendation from some one in a responsible position. The *Manual for Readers* (obtainable from the Librarian) contains full information about the contents and catalogues of the Library. The chief books relating to it are : Macray, W. D., *Annals* (Clar. Press, 1890, 25s.) ; Clark, A., *Guide for Visitors* (Clar. Press, 1906, 1s. 6d.) ; Gibson, S., *Some Oxford Libraries* (Clar. Press, 1914, 2s. 6d.) ; Madan, F., *The Bodleian Library*, London, 1921, 2s. ; *The Bodleian Quarterly Record* (1s. quarterly, obtainable from the Libn.).

The Taylorian Library of *Modern Languages and Literature*, 50,000 vols., comprises the chief philological, literary, and historical works of the principal European languages and nearly all respective Reviews, Literary periodicals, etc., of Continental Societies of importance. The Radcliffe (Univ. Museum) consists very largely of books on Mathematics, Natural Science, and Medicine, and the Tylor *Anthropological* collection.

The Codrington Library (All Souls College) is especially rich in works bearing upon *Modern History and Law*. The Brand Library, also at All Souls, is a collection of books on *Political Economy and Science*. The Maitland Library, at the Examination Schools, is intended to assist advanced work and research in *Social and Legal History*. There are also the following : the Beit Library (*Colonial History*) and the Library of the *English School* at the Examination Schools ; a *Geographical Library* (5000 vols.) and *Maps* (13,000 sheets) in Mansfield Rd. ; and a Library of *Economics and Politics* at Barnett House.

The *Indian Institute* has 23,000 vols. representing ancient, mediæval, and modern India and including also Arabic, Armenian, Georgian, Turkish, Egyptian, Burmese, and Chinese works ; Sanskrit and Prakrit MSS. (printed catalogue) ; all the leading Oriental journals in English, French, and German ; and a Museum giving an historical synopsis of Indian life and customs.

The *College Libraries* include many important collections such as the *Russian and other Slavonic* books, 5000 vols., of Queen's ; *History and Literature* MSS. of 17th Century of Worcester ; *Music and Early Scandinavian* collections of Christ Church. The MSS. in the College Libraries are described in Coxe's Catalogue, published at the Clarendon Press.

*Art and Archæology*. The Ashmolean, the earliest English Museum, formed 1600-1650, contains, in addition to a Library of *Art and Archæology*, the Parian and other marbles, Egyptian and Oriental, Classical, Prehistoric, Anglo-Saxon and local antiquities, 60,000 coins and medals (published catalogue of Mohammedan coins), and a special collection of Drawings and Engravings by Ruskin.

The Pitt-Rivers Museum has an *Anthropological* collection illustrating evolutionary history of material arts.

*Zoology, Geology, Mineralogy* (17,000 spec.), *Entomology* (Lepidoptera Collection illustrating mimicry, etc.), are all represented in the Univ. Museum.

LABORATORIES : Electrical ; Clarendon (chiefly for study and research in Heat, Optics, and Acoustics) ; Chemistry, Organic and Inorganic (several Colleges have labs. of their own, e.g., Ch. Ch., Magd.—Analyt. Chem. ; Ball. and Trin.—Phys. Chem. ; Jes.—Inorganic ; Queen's) ; Physiol. ; Zool., with small expl. garden ; Entom., with extensive Collections and Library ; Botany (Garden with Collections and Library) ; Geology (special equipment for study of fossils by serial sections) ; Mineralogy (special facilities for research in Crystallography) ; Engineering ; Forestry (expl. plantations and forest garden) ; Model Farm ; Human Anat. ; Path. and Bact. ; two *Observatories*.

There is an Institute for Research in *Agricultural Economics* which has prepared an Agr. Atlas of England and Wales, published by Ordnance Survey Dept.

THE OXFORD AND CAMBRIDGE SCHOOLS EXAMN. BOARD, established 1873, examines or inspects and reports on the work of schools which provide education of the highest grade. It also holds yearly examns. and awards certificates—Higher, School, and Lower. The two former exempt the holder, under certain conditions, from Responsions, Previous, Matricn. examns. of London and of the Northern English Univs., and the Prelim. examns. of various professional bodies, etc. The Regns. of the Board are published by the Ox. and Camb. Univ. Presses (post free 1s. 3d.). Secretaries: at Oxford—C. H. Wilkinson, M.A., Examination Schools; at Cambridge—T. G. Bedford, M.A., 61A St. Andrew's St.

LOCAL EXAMINATIONS are held in March, July, and Dec. at Oxford and elsewhere. Candidates successful in the School Certificate or Higher Local examns., or in the Higher School Certificate examn., are on certain conditions exempted from Responsions. The regns. may be obtained from the Secy. of Local Examns., Merton St. All the examns. are open to persons of both sexes.

UNIVERSITY EXTENSION. The system begun in Camb. was adopted by Ox. in 1878. Up to the end of the session 1921-22 the number of persons attending courses was over 629,000, and the number of students examined 29,366; 20 summer meetings had been held. Reading Univ. Coll. largely owes its origin to extension work. The following certifs. are issued under the sanction of the Delegacy: Terminal, on courses of 10 or 12 lectures; Sessional, on 24; Sessional in Honours, implying distinction and a special essay; affiliation or Higher Certif. of Systematic Study, on a sequence of courses comprising 96 lectures *plus* a general examn.; Vice-Chancellor's, on same conditions as affiliation *plus* examn. in Elem. Maths. and 2 languages. The majority of the lectures are on historical, scientific, or literary subjects. Any Univ. Extension student who avails himself of all the advantages offered, including the Summer Meeting, can secure continuous and systematic instruction in almost any subject for a yearly outlay not exceeding £10. Two Colls. (Ball. and Ch. Ch.) have elected Senior Extension Lectrs. to Fellowships or Studentships in view of their success in Univ. Extension work. Further information can be obtained from the Secy. to the Delegates, Univ. Extension Office, Examn. Schools, Oxford (Rev. F. E. Hutchinson, M.A.).

*Tutorial Classes* are held in working-class districts under the supervision of a Standing Committee consisting of 7 Univ. Extension Delegates and 7 representatives of the working classes. Students pledge themselves to a 3 yrs.' course. The classes meet once a week for 2 hrs. from Sept. to April, and each student writes an essay every fortnight. The Organizing Secy. is E. S. Cartwright, M.A., Barnett House, Oxford.

PUBLICATIONS. *Calendar* (Nov.) 15s. net (includes Honours of each year since Oct. 1911. Earlier Honours given in Historical Register 1900, 2s. 6d.); *First Supplement to Hist. Reg. (1900-1920)* giving, in addition to class lists and Hon. lists, information regarding constitution, Scholarships and Prizes, Offices and their incumbents, etc., 10s. 6d. net. *Responsions Pamphlet* (June) 6d. (Regns. for 1922-24 with dates of examns. and general information); *Preliminary Examination in Natural Science* (Regns. for 1922-24 and general information) 6d. net; *General Information* (admission, residence, examns. for B.A., etc.), 1922, 7d. post free; *Statutes and Decrees* (Oct.), 5s. net; *Examn. Statutes* (July), 3s. 6d. net; Pamphlet on *Advanced Study and Research* (Research Degrees, subjects of study, Libraries and Collections, Scientific Departments and Staffs), 1s. net; *Enactments* in Parliament concerning Ox. and Camb., Winchester, Eton, and Westmr., 2 gs.; *Principles and Methods of*



*Univ. Reform*, by Curzon, 1909, 2s. 6d. net; *Univ. Gazette* (official), 6d. weekly.. Oxford Univ. *Roll of Service*, 1920, with names (14,561) and records of members of the Univ. who served in the Mily. and Naval Forces during the War, 15s. net. All the above are obtainable from the Oxford Univ. Press and its branches. The *Ox. and Camb. Year-book and Directory*, Sonnenschein, 5s.; each part gives short records of living graduates. Numerous Histories of the Univ. and Colleges have been pubd. by the Ox. Hist. Soc., Hutchinson and Co., and others.

EXPENSES. "It is not possible to make any general estimate of the cost of a University course, which varies at different colleges, and depends upon the student's own means and tastes. It must suffice here to enumerate certain items common to all undergraduates, and to recommend persons anxious for further details to consult the authorities of the Society which they wish to join. . . . The total cost of living in college might perhaps be estimated at about £60 a term for a man who exercises reasonable care in his expenditure. At Keble College there is a fixed annual charge (at present £150), covering tuition, the rent of furnished rooms, board, and service. The necessary expenses of a non-collegiate student have been estimated at about £81 per annum inclusive, which would make it possible to obtain the B.A. degree after a 3 years' course for a total outlay of £267 : 10s. At the residential Societies for Women Students an inclusive terminal fee is charged. This is about £50 a term, but varies slightly at the different Societies."—Extract from *General Information* pamphlet mentioned in preceding paragraph. The items specified are:—(1) Annual: Univ. dues, £4 : 10s.; College tuition fee, £24 to £31 : 10s.; room rent, £15 to £18; hire of furniture, £6; College clubs, £6; rates and taxes on the rooms occupied, College dues and establishment charges and servants' wages, kitchen and buttery bills, fuel, laundry, lighting, etc. (amounts not separately estimated). (2) Initial: matricn., £4; College admission fee (usually £5, but often less); College caution-money, £10 to £30 (returned when name is removed from the books, and often in part on taking a degree). (3) Occasional: examn. fees, about £9 for B.A. (exclusive of Responsions, £3); degree fees (B.A., B.Litt., or B.Sc., £7 : 10s.).

What has been stated above regarding the difficulty of estimating expenses at Oxford applies equally to Cambridge. The *Student's Handbook to Cambridge*, 1922-23 (Cambridge University Press, 7s. 6d.), deals with the subject of expenses very fully, and concludes with the following remarks: "The total annual expenditure of a student, *exclusive of initial, occasional, and additional expenses*, may be fairly estimated at about £235, although on the one hand it is possible by great care to live upon less, and on the other hand a larger expenditure will often enable the student to obtain greater advantages from a University career. . . . It is of the utmost importance that the foregoing estimates should not be taken for more than they are worth. . . . The only safe guide to a student's expenditure is information supplied by the college itself at which he decides to enter." The detailed statements on which the above estimate of annual expenditure is based include "guesses" as to personal expenses which the Oxford estimate leaves out of account. The items are:—Univ. fees (capitation tax), £5 : 5s.; College fees, £54 (tuition, £24 to £30; establishment charge, £18 to £21; College dues, £4 to £10); board and lodging, £110 (rooms and service, £21 to £50; food expenses, £38 to £87; fuel, £5 to £7; laundry, £4 : 10s. to £9); personal expenses, £67 (books, travelling, tradesmen—including tailor, etc., clubs, and societies). The excluded initial expenses are caution-money, College admission fee (£2 to £5), matricn. £5, furniture, linen, china, etc., and (£2 to £4 : 10s.) cap, gown, and surplice. The "occasional" fees are for examns. £8 (medical,

£16:8s.), and degree fees, £5. The "additional" expenses (which may be heavy, especially if much private tuition has to be allowed for) are additional lecture and laboratory fees, long vacation expenses, and private tuition.

## THE YEAR 1921-22

**BENEFACTIONS.** Trustees of Christopher Welch benefaction, services of Lectr. in Clinical Physiol. for 5 yrs. at £450 p.a.; W. Warner bequest, £1000 for Tutorial Classes; Sir J. A. Simon, £1000 for Soc. of Oxford Home Students (memorial schol'p. fund); G. Bodley, £5000 for Bodleian Library; Mrs. Emily Geldart, law books and £500 for Nettleship Library (endowment); H. T. Gerrans bequest, £1500 for Taylor Institn. (endowment of study of German); friends of late H. T. Gerrans, £1000 for Memorial Fund for promotion of advanced study of modern langs.; Dr. Vavro Srobar, Minister of Educn. of Czechoslovak Republic, on behalf of his Govt., Slavonic books for Taylor Institn.; also, in Nov. 1922, Sir Wm. Dunn's trustees, £100,000 for new School of Pathology and £3000 for School of Pharmacology.

**INTERNATIONAL FELLOWSHIPS.** Princeton University offered to appoint from time to time a Visiting Fellow from Oxford for study and research in their graduate college. Harvard Univ. Divinity School offered for 1922-23 two "Williams Fellowships."

**VISITORS FROM ABROAD** who lectured: Profs. Paul Collinet of Paris, Adolf Wilhelm of Vienna, Albert Sweitzer of Strasbourg, A. Gabrichevsky of Moscow, A. F. Holleman of Amsterdam, F. Brunot of Paris, R. M. Pidal of Madrid.

**LEGISLATION.** The consultative and legislative powers of the General Board of the Faculties were extended; the condition that examiners in the Final Honour School of Theology must be members of Convocation in Priests' Orders was abolished; power was given to examiners to dispense with *viva voce* examn. in case of duly attested illness; the various Prelimy. examns. which were formerly part of the 2nd Public examn. were all included in the 1st P.E.; the conditions of admission to the D.M. degree were amended; the duties of Boards of Faculties were further defined and the title of University Demonstrator was abolished; the statute relating to Affiliated Students was altered so that no course is in future to be approved as a qualification for the status of Junior Student unless it has included the study of 2 languages other than English, of which either Latin or Greek or, in the case of an Indian student, either French or a Classical Oriental language must be one, and no Junior Student will proceed to the degree of B.A. unless he has taken Honours either in the 1st or the 2nd Public examn. or has passed the Final School of Agric. and Forestry; the Delegacy for Women Students was abolished and a Women Students' Property Committee was established.

**NUMBER OF STUDENTS.** Undergraduates on the books at the beginning of Michs. term 1922, men 4767, women 932. Successful candidates in the Final Honour Schools in 1922: men, 938; women, 123; namely—Litt. Hum., 140, 6; Maths., 26, 0; Nat. Sc., 156, 11; Jurispr., 118, 1; Mod. Hist., 316, 42; Theol., 64, 1; Oriental Langs., 3, 0; Engl. Lang. and Lit., 70, 46; Mod. Langs., 45, 16. Advanced students preparing for the D.Phil in 1922 Trinity Term, 73.

**RHODES SCHOLARS.** Number actually in residence in 1921-22 (whole or part), 300—studying Law, 98; Nat. Sc. and Med., 66; Hist., 40; Econ.

(Diploma and B.Litt. or D.Phil.), 13; Litt. Hum., 12; Engl., 17; Theol., 18; Maths., 5; other subjects, 31.

HONORARY DEGREES. *D.C.L.*—Chief-Justice W. H. Taft (formerly President of the U.S.A.); Lord Birkenhead; Archbishop Bourne of Westminster; Lord Buxton; Prof. Solomon Reinach, member of the Institute of France. *D.Lit.*—Prof. Pidal of Madrid; John Masefield. *D.D.*—Bishop W. S. Swayne of Lincoln. *D.Sc.*—Prof. J. Perrin of Paris; Prof. F. G. Hopkins; J. H. Jeans, Secretary to the Royal Society. *D.Mus.*—Sir Alexr. C. Mackenzie. *M.A.*—F. J. Hall; Miss E. Wordsworth; Miss C. A. E. Moberly.

OTHER DEGREES. B.A., 1223; M.A., 370; B.D., 8; B.C.L., 8; B.M., 14; B.Litt., 43; B.Sc., 15; D.Phil., 10; D.D., 6; others 14. The Encænia of 1923 will be on June 27.

PROFESSORES EMERITI. E. B. Elliott (Maths.), F. Y. Edgeworth (Pol. Econ.).

DEATHS. H. Boyd, W. Morrison, Lord Halsbury, Viscount Bryce, Sir W. A. Raleigh, Sir H. E. Richards, W. M. Geldart, B. Moore, A. Serena, A. V. Dicey, J. S. Lockhart, H. Krebs.

UNIVERSITY EXTENSION DELEGACY. 778 lectures distributed in 121 courses at 84 centres, regularly attended by over 12,000 persons. 30 lecturers were employed. Of the courses 24 were in Hist., 50 in Lit., 16 in Econ., 11 in Art and Archæol., 9 in Nat. Sc., 10 in Music, 1 in Philos. and Ethics. 17 full Tutorial Classes and 4 preliminary courses were held with an average attendance of 336. A summer meeting in Oxford will be held in Aug. 1923, subject—Universities, Mediæval and Modern, and their place in National Life; with subsidiary courses on economic and scientific subjects.

# THE UNIVERSITY OF SHEFFIELD

VISITOR—H.M. THE KING.

CHANCELLOR—The Most Hon. the MARQUESS OF CREWE, K.G.

PRO-CHANCELLORS—H. K. STEPHENSON, LL.D., J.P., D.L., M.P. ; Sir  
A. J. HOBSON, LL.D., J.P.

VICE-CHANCELLOR—SIR W. HENRY HADOW, C.B.E., M.A., D.Mus., J.P.

TREASURER—D. VICKERS, J.P.

REGISTRAR—W. M. GIBBONS, O.B.E., M.A.

LIBRARIAN—A. P. HUNT, B.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Anatomy</i>	[A. Jackson Prof.	Smith, T. B., B.Sc. Lond.
Patten, C. J., M.A., M.D., Sc.D.		Asst. Lectr.
Dub., F.R.A.I.		Chapman, A. W., B.Sc. Lond.
Naish, Mrs. Lucy, M.D. Lond.		Demr.
(Osteology)	Lectr.	<i>Civic Art</i>
5 Demrs.		Rothenstein, W., M.A. Prof.
<i>Architecture</i>		<i>Classics</i>
Carus-Wilson, C. D., A.R.I.B.A.		Forster, E. S., M.B.E., M.A. Ox.,
	Lectr.	F.S.A. (Greek) Prof.
Leighton, H. B., A.R.I.B.A.		Summers, W. C., M.A. Camb.
	Asst. Lectr.	(Latin) Firth Prof.
3 Hon. Lectrs. for Evening		Whitehead, Florence, M.A. Manc.
Courses.		Lectr.
<i>Art, v. Civic</i>		Craig, J. D., M.A. St. And., B.A.
<i>Biology, v. Zool.</i>		Ox. Lectr.
<i>Botany</i>	[Lectr.	<i>Dentistry, v. infra</i>
Bentley, B. H., M.A. Ox., F.L.S.		<i>Economics</i>
Cole, L. W., B.Sc. Lond.		Knoop, D., M.A. Manc. Prof.
	Asst. Lectr. & Demr.	Beales, H. L., M.A. Manc. Lectr.
<i>Chemistry</i>		Jack, T., M.A. Glas. Lectr.
Wynne, W. P., D.Sc. Lond.,		<i>Education</i>
F.R.S., F.I.C. Firth Prof.		Turnbull, G. H., M.A. Liv., Ph.D.
Kenner, J., D.Sc. Lond., Ph.D.		Bonn Prof.
Heid. (Organic C.) Lectr.		Thompson, J. R., M.Sc. Durh.
Tryhorn, F. G., M.Sc. Liv. (Phys.		
C.) Lectr.		
Turner, Emily G., M.Sc.		
	Asst. Lectr.	King, Etheldreda, B.A. Lond.
Bennett, Dorothy M., M.Sc.		Lectr.
	Asst. Lectr.	Bone, Woutrina A., B.A. Lectr.

Vickers, W., M.Sc., M.Ed. Manc.  
Lectr.  
Bradford, E. J. G., M.Sc. Lond.  
Lectr.

*Engineering, Mechanical*

Ripper, W., C.H., Hon.D.Sc.Eng.  
Bris., D.Eng., M.I.C.E. Prof.  
Boulden, F., B.Sc. Lond., M.Eng.,  
M.I.M.E., A.M.I.C.E.  
Senr. Lectr.  
Kershaw, J. W., M.Sc. Manc.,  
M.Eng. Senr. Lectr.  
Wall, T. F., D.Sc. Vict., D.Eng.  
Liv.

Lectr. in Mech. and Elec.  
Research.

Hibbins, W. G., B.Sc. Lond.,  
B.Eng., A.M.I.C.E. Lectr.  
Waite, C. W., B.Sc. Lond. Lectr.  
Davies, H. J., B.Sc. Lond. Lectr.  
Chappell, A. J., B.Sc. Lond.,  
A.M.I.C.E. Asst. Lectr.  
Gulliver, G. C. Demr.  
Burnet, W. Asst. Lectr. & Demr.  
Turner, F. C., M.Eng., A.M.I.E.E.  
Lectr. & Demr.  
Joyce, T. C., B.Sc. Lond. & Bris.,  
A.M.I.E.E.  
Asst. Lectr. & Demr.  
Colburn, J.  
Head of Woodwork Dept.

*Engineering, Civil*

Husband, Joseph, M.Eng.,  
A.M.I.C.E., M.S.C.E. France,  
F.R.C.Sc.I. Prof.  
Fordham, A. A., A.M.I.C.E.

*Engineering, Elec.*

[Lectr.  
Crapper, E. H., M.Eng., M.I.E.E.  
Asst. Lectrs.:  
Hainsworth, C. H., A.M.I.E.E.  
Hunt, F. O., A.M.I.E.E.

*Engineering, Mining*

[Prof.  
Hay, D., B.Sc. Lond., A.M.I.C.E.  
Statham, I.C.F., B.Eng., F.G.S.  
Lectr.  
Bevan, E. Lectr.

*English Lang. and Lit.*

Smith, G. C. Moore, Litt.D. Camb.,  
Hon.Ph.D. Louv. Prof.  
Jones, J. D., M.A., B.A. Lond.,  
Ph.D. Berl. Lectr.  
White, H. M. O., M.A. Dub. Lectr.

*French*

Baker, A. T., M.A., Litt.D. Camb.,  
Ph.D. Heid. Prof.  
Larg, D. G., M.A. Aberd. Lectr.  
Larsonneur, A.-J., L. ès. L., Ag.  
Lang. Mod. Asst. Lectr.

*Geography*

Brown, R. N. Rudmose, D.Sc.  
Aberd. Lectr.

*Geology*

[Sorby Prof.  
Fearnside, W. G., M.A. Camb.  
Wilcockson, W. H., M.A. Camb.  
Lectr.

*German*

Willoughby, L. A., M.A., D.Lit.  
Lond., Ph.D. Vienna Lectr.

*History*

Appleton, H. W., M.A. Ox.  
Prof. (Ancient H.).  
Black, J. B., M.A. Glas. and Ox.  
Prof. (Mod. & Const. H.).  
Ward, E. H., M.A. Camb.  
Lectr. (Eccl. H.).

Perham, Marjory

Lectr. (Modern and Const. H.).  
Catlin, G. E. G., B.A. Ox.  
Lectr. (Modern H.).

*Law*

Trotter, W. F., M.A., LL.D.  
Camb., Barr.-at-Law, K.C.  
(Scot.) Prof.  
Metcalfe, O. K., M.A., LL.M. (Pub.  
and Com. L.) Lectr.  
Ellis, B., LL.B., Barr.-at-Law  
Asst. Lectr.

*Mathematics*

..... Town Trust Prof.  
Stewart, C. A., M.A., B.Sc. Glas.,  
B.A. Camb. Lectr.  
Spencer, T. B. W., M.A. Camb.  
Asst. Lectr. & Tutor.

Stoneley, R., M.A. Camb.  
Asst. Lectr.

Bryan, W. E., M.A. Camb.  
Asst. Lectr.

Thompson, R. S., B.Sc. (for  
Engin.) Lectr.

*Medicine, v. infra*

*Metallurgy*

Desch, C. H., D.Sc. Lond., Ph.D.  
Wurz., F.I.C. Prof.

Knowles, F. K., M.Met. Sen. Lectr.  
Ibbotson, F., B.Sc. Lond., D.Met.,  
F.R.C.Sc.I., F.I.C.

Sen. Lectr.  
Wreaks, J. H., B.Met. Lectr.

Orme, F., M.Met. Lectr.

Lobley, A. G., M.Sc. Manc.  
Lectr. (Electro-M.).

Percival, R. T. Demr.

Gregory, E. Demr.

*Music*

Linfoot, G. E., B.Mus., B.Sc.  
Lond. Lectr.

*Philosophy*

Laing, B. M., M.A. Aberd. Lectr.

*Physics*

Milner, S. R., D.Sc. Lond. and  
Bris., F.R.S. Prof.

Southern, L., M.A. Camb., B.Sc.  
Lond. Lectr.

Lawson, R. W., D.Sc. Durh.  
Lectr.

Mathews, Irene M. Asst. Lectr.

Clarke, J. R., M.Sc. Asst. Lectr.

Saxton, A. J., M.Sc. Asst. Lectr.

*Physiology*

Leathes, J. B., M.A., M.B., B.Ch.  
Ox., F.R.C.S., F.R.C.P.,  
F.R.S. Prof.

Eaves, Eliz. C., B.Sc., M.B., B.S.  
Lond. Lectr.

Imrie, C. G., M.D. Westn., Ont.  
Lectr.

Watson, E. M., M.D. Westn., Ont.  
Demr.

Mellanby, Mrs. (Dental Hist.)  
Demr.

*Public Health, v. Medicine*

*Russian* [Vickers Lectr.  
Birkett, G. A., M.A. Liv.

*Spanish* [Hughes Lectr.  
Birch, J. N., B.A. Lond.

*Technology, Fuel* [Prof.  
Wheeler, R. V., D.Sc. Manc., F.I.C.

Batley, W. A., M.Sc. Manc. Lectr.  
Wigginton, R., B.Sc. Lond.,  
A.R.C.S. Lectr.

Beet, A. E., B.Met. Demr.

Rees, W. J., B.Sc. Tech., F.I.C.  
Lectr. in Refractories.

*Technology, Glass*

Turner, W. E. S., O.B.E., D.Sc.  
Lond., M.Sc. Birm. Prof.

English, S., M.Sc., A.I.C. Lectr.  
Cousen, A., B.Sc., A.R.C.S., A.I.C.  
Asst. Lectr. & Demr.

Connolly, J. Hon. Lectr.

Wood, D., F.S.A.A. (Accounting)  
Hon. Lectr.

*Research Assts. :*

Hodkin, F. W., B.Sc., A.I.C.

Dimbleby, Violet, B.Sc.

Firth, Edith M., B.Sc.

Parkin, M., B.Sc. Demr.

*Zoology*

Denny, A., M.Sc., F.L.S. (also  
Prof. of Biol.) Prof.

Grove, A. J., B.A. Camb., D.Sc.  
Birm. Lectr. & Demr.

Tetley, H., B.Sc. Leeds  
Asst. Demr. and Cur. of Museum.

*Medicine (for subjects of first 2  
yrs.—Anat., etc., v. supra)*

*Dermatology and Radiology*

*Clin. Teachers :*

Hallam, A. R., M.D., Ch.B. Edin.  
Morrell, R. A., L.R.C.P., M.R.C.S.  
(Rad.).

Skinner, E. F., M.A., M.B., B.Ch.  
(Derm.) (also Tutor in Med.).

*Diseases of Children*  
Leader, H., M.B. Lond. Lectr.  
5 other Clin. Teachers.

*Dis. of Ear, Nose, and Throat*  
Wilkinson, G., B.A., M.B., B.Ch.  
Camb., F.R.C.S. Lectr.  
1 other Clin. Teacher.

*Diseases, Infectious*  
Williams, E. H., M.D. Brus.,  
D.P.H. Lectr.

*Diseases, Mental* [Lectr.  
Vincent, W., M.D., B.S. Durh.  
1 other Clin. Teacher.

*Diseases of Women*  
King, W. W., M.B., Ch.B. Bris.,  
F.R.C.S.E.  
Lectr. and Clin. Teacher.

*Forensic Medicine*  
Carter, G., M.B., Ch.B. Manc.,  
D.P.H. Lond. Lectr.

*Medicine*, v. also Derm.  
Hall, A. J., M.A., M.D. Camb.,  
F.R.C.P. Prof.  
Naish, A. E., M.A., M.B., B.Ch.  
Camb., F.R.C.P. Lectr.  
Barnes, A. E., M.B. Lond., M.B.,  
Ch.B., F.R.C.P. Lectr.  
3 other Clin. Teachers.

*Obstetrics and Gynæcology*, v. also  
Dis. of Women  
Phillips, Miles H., M.B., B.S.  
Lond., F.R.C.S. Prof.

*Ophthalmology*  
Pooley, G. H., B.A. Camb.,  
F.R.C.S. Eng. & Edin. Lectr.  
3 other Clin. Teachers.

*Pathology*, v. also Surg.  
Douglas, J. S. C., M.A., D.M.,  
B.Ch. Ox., M.Sc. Birm.  
Joseph Hunter Prof.  
Simson, F. W., M.B. Edin. Lectr.  
Platt, R., M.B., Ch.B. Demr.  
Pleasance, R. E., M.B., Ch.B. Demr.

Edington, J. W., M.D., D.P.H.  
Edin. Dir. of P.H. Bact. Lab.  
Buttery, Ethel M., M.B., Ch.B.

Asst. Dir.  
Yates, A. G., M.D. Edin., M.A.,  
M.B., Ch.B. Lond. Demr.

*Pharmacology*, v. also Physiol.  
Mellanby, E., M.A., M.D. Camb.  
Prof.  
Southgate, H. W., M.B., B.S.,  
B.Sc. Lond. Lectr.

*Public Health*  
Wynne, F. E., M.B., B.Ch. Dub.,  
D.P.H. Manc. Prof.  
Anderson, A., M.B. Aberd., D.P.H.  
Demr.

*Surgery*  
Connell, A., Ch.M., F.R.C.S. Edin.  
(also Asst. Lectr. and Demr.  
in Path.) Prof.  
Simpson, G., F.R.C.S. Lectr.  
Cuff, A., B.A., M.B., B.Ch. Camb.,  
F.R.C.S. Lectr.  
Mouat, T. B., M.D., Ch.B. Edin.,  
F.R.C.S. Tutor.  
4 other Clin. Teachers.

*Tuberculosis*  
Rennie, J., M.D. Aberd., D.P.H.  
Lectr.

*Vaccination* [Lectr.  
Chisholm, J., M.B., Ch.B. Edin.

*Dental Science*, v. also Physiol.  
Law, W. J., L.D.S. (D. Anat. and  
Physiol.) Lectr.  
Froggatt, G. H., L.D.S. (D. Mech.  
and D. Surg.) Lectr.  
Stokes, P. S., L.D.S. (D. Surg.)  
Lectr.  
Watson, C. T., L.D.S. (Orthod.)  
Lectr.  
10 Clin. Dental Teachers.

*Adult Education*  
Tutors: 7 members of the Staff  
and 5 others.

## GENERAL INFORMATION

University College, Sheffield, incorporated by Royal Charter in 1897, was in 1905 merged in the University of Sheffield constituted by Royal Charter in that year. The city being an important centre of steel, electro-plate, glass, and other manufacturing industries, and in the heart of an extensive coal-mining area, students of Engineering, Metallurgy, Mining, Fuel Technology, and Glass Technology have exceptional opportunities.

**LIBRARY**, 56,000 vols. Also Special Applied Science and Glass Technology departmental collections. **RESEARCH DEPARTMENT LABORATORIES** include Engineering, with complete illustrative power-plant, air-compressors, hydraulic appliances, testing machines, 45-h.p. motor-driven high-speed steel tool-testing lathe, etc., the machine-tool branch being a special feature; Electro-tech. (lighting, traction, power transmission, mining, electro.-chem.), all provided with continuous and alternating currents, provision being made for 12 different combinations of parallel-running; Metallurgical, with the most modern apparatus for analysis and equipment, the most complete of its kind, for teaching practical manuf., chem. composition, and physical properties of steel (Siemens furnace of 2 tons capacity, Bessemer converter, elec. and annealing furnaces, etc.); Non-ferrous Dept., completely equipped for every phase of the work of the lighter Sheffield trades, silver and E.P., brass, and allied industries; Micrographic and Recalescence, each with complete installations; Glass Technology model factory for dealing with scientific manuf. on a commercial scale. **OBSERVATORY** with  $6\frac{1}{4}$ " equatorial. **HOSPITALS** available for clinics include 2 general (517 beds), 3 special (740), and Lunatic Asylum.

**FACULTIES.** Arts, Pure Science, Medicine, Law, Engineering (Depts. of Mech., Elec., Civ., and Mining E., Fuel Tech., Glass Tech.), and Metallurgy (Ferrous and Non-Ferrous). Dental Department.

**DEGREE COURSES.** 3 yrs.—B.A. (with Honours in Archit.—5 yrs., including 2 in an Architect's office), B.Sc., LL.B. (Graduates of a Univ. of the U.K. need only attend courses for 2 yrs., if they have pursued a course for 2 yrs. at some approved institution), B.Met. (3 yrs.' evening courses may be taken by students of 20 yrs. of age in lieu of the 2nd and 3rd yrs.' day courses), B.Eng. ("Sandwich" course 4 yrs.), B.Sc.Tech. ("Sandwich" course 4 yrs.); 5 yrs. (including 3 in the Univ.)—M.B., Ch.B., B.D.S.

Attendance on approved courses at a Univ. or Coll. recognized for the purpose may be accepted as equivalent to such courses in the Univ. The Univs. of Paris and Caen have been recognized in the Faculty of Arts, and the Univ. contributes towards expenses of undergraduates spending a term there. Courses in Chem., Phys., and Zool. at Univ. Coll., Nottingham, qualify for entrance for the 1st M.B., Ch.B.

A Secondary Schools Council, including, in addition to members of the Univ. staff, representatives of local education authorities and school staffs, keeps the Univ. in touch with secondary educn.

**HIGHER DEGREES.** Obtainable by Bachelors of 1 yr.'s standing—M.A., M.Sc., LL.M., M.Eng., M.Sc.Tech., M.Met., M.D., Ch.M., M.D.S.; 5 yrs.—Litt.D., D.Sc., LL.D., D.Eng., D.Sc.Tech., D.Met.; open to graduates in Arts of any Univ. of the U.K. after 2 yrs., to graduates of Faculties other than Arts after 3 yrs., of advanced study or research in Sheffield—M.A.; open to graduates in Science of any Univ. of the U.K. after 2 yrs. of advanced study or research in Sheffield—M.Sc.; Ph.D., v. p. 15.

**DIPLOMAS.** Archit., 5 yrs. (including time spent in an Architect's office);



Modern Lang. Teaching (graduates in Arts or others of similar attainments in the Lang.), 1 yr. course; Educn. (after graduation), 1 yr. (special facilities for Pedagogical research); Domestic Science, 2 yrs.; D.P.H., 9 mos.; L.D.S., 4 yrs.; Glass Tech., 3 yrs. (for those with 2 yrs.' pract. experience, 2 yrs.); Associateship in Engin., 3 yrs. (Works Pupils and Evening students, 4 yrs.); Associateship in Iron and Steel or Non-Ferrous Metallurgy, 3 yrs. (evening students, 4 yrs.); Mining, 4 yrs. (6 mos. each year in Colliery and 6 in Univ.; exemption from first yr. obtainable through examn. The Dipl. enables a student to sit for the examn. for a colliery manager's certif. after 5 yrs.' total training, including the time spent in the Univ.); Fuel, 4 yrs.; exemption from first yr. in special cases.

FEES. Matricn. £2. Registn. 2rs. or 25s. Tuition for degree courses (approximate): B.A., £23:15s. p.a.; B.Sc., £30 p.a.; LL.B., about £13 p.a.; B.Eng., B.Met., B.Sc.Tech. (Glass or Fuel), 37½ gs. p.a.; "Sandwich" course for B.Eng., 4 yrs., £29:10s. p.a.; M.B., Ch.B., £190 for 5 yrs.' course, including hospl. fees; B.D.S., £225 for 5 yrs.' course including Mech. Dent. Examns., Interm., £2; Final, Pass Degree, £2; Honours, £3 (M.B., Ch.B. or B.D.S. examns., £6 each of 3). Degree Fee, £5.

SCHOLARSHIPS, ETC., FOR GRADUATES. Sorby Research Fellowship (administered by Royal Society) for research in Sheffield Labs., about £500 p.a. for 5 yrs., renewable; Alfred Tongue Scholp., £100 for 1 yr. for research in Engin., Met., or Chem.; George Senior Fellowships, £125 p.a., 2 offered annually for research, one in Engin. and one in Met.; several others of from £50 to £100.

RESIDENCE, ETC. Stephenson Hall, for men; fees per session, £90. Univ. Halls for women, Oakholme and Taptan Cliffe, £51 to £75 per session. A list of supervised Lodgings is maintained; board and lodging cost from 30s. to 50s. per week. Athletics ground, 15½ acres. The Students' Rep. Council takes a leading part in the Social life of the Univ. Separate Students' Unions for men and women.

UNIVERSITY EXTENSION work includes Tutorial classes, Free Extension Lectures, Collaboration (for Adult Educn. Lectures) with the Sheff. Educn. Committee.

PUBLICATIONS. *Calendar* (Oct.), 5s.; *Floreamus*, a Chronicle pubd. at end of each term, annual subs., 2s. (the 10 completed vols. give a full history of the Coll. and Univ., with portraits, etc.); Annual Report in Nov.

## THE YEAR 1921-22

BENEFACTIONS. Donations up to July 31, 1922, to New Buildings and Endowment Fund amounted to £49,050, for Dept. of Glass Technology to £6826.

NEW BUILDINGS, ETC. A Glass Works in Sheffield was acquired for the Dept. of Glass Technology.

OTHER DEVELOPMENTS. The degrees of B.D.S. and M.D.S. and a diploma of L.D.S. have been instituted.

NUMBER OF STUDENTS. Full-time preparing for 1st degree, 638, including women 197, for 1st diploma, 205 (women 10). Part-time preparing for 1st degree, 2; for 1st diploma, 56. Research students, 19; other advanced students, 140 (w. 6). Occasional, 43 (w. 18). Other students—day 463, evening 1572. Distribution by Faculties of day students preparing for Degrees or Diplomas: Arts, 210; Pure Sc., 215; Med., 206; Law, 22; Engin., 155;

Mining, 42 ; Fuel Tech., 20 ; Glass Tech., 12 ; Metall., 94. Students from abroad : India, 15 ; Egypt, 13 ; other countries, 12.

DEGREES CONFERRED. B.A. 45, including 21 women ; B.Sc. 48 (women 8) ; M.B., Ch.B. 11 (women 7) ; LL.B. 3 ; B.Eng. 44 ; B.Sc.Tech. 14 ; B.Met. 14 ; Masterships 57 ; Ph.D. 3.

HONORARY DEGREES *D.Eng.*—Sir Charles Parsons. *M.A.*—F. J. Leslie, W. E. Raley, T. W. Hall, M. J. Sorby.

TUTORIAL CLASSES, 36 three-year classes.

RESIGNATIONS. Professor A. H. Leahy ; Lectrs., etc., W. E. Curtis, J. Thomson, Kathleen Ibbotson, H. J. Kerry, H. P. Lewis, G. B. Brook.  
DEATH. Prof. J. A. Green.

# UNIVERSITY OF WALES

VISITOR AND PROTECTOR—H.M. THE KING.

CHANCELLOR—H.R.H. THE PRINCE OF WALES.

PRO-CHANCELLOR—Rt. Hon. LORD KENYON, K.C.V.O.

VICE-CHANCELLOR—for biennium ending Aug. 31, 1923, Principal  
A. H. TROW, D.Sc., Univ. Coll. of South Wales and Monmouthshire.

WARDEN OF THE GUILD OF GRADUATES—ERNEST E. HUGHES, M.A.

CLERK OF THE GUILD OF GRADUATES—F. E. REES, B.Sc.

PRESIDENT OF THE THEOLOGICAL BOARD AND DEAN OF DIVINITY—  
Principal SILAS MORRIS, M.A.

REPRESENTATIVE IN PARLIAMENT—T. A. LEWIS, B.Sc.

REGISTRAR—D. B. ANTHONY, M.A., University Registry, Cathays  
Park, Cardiff.

SECRETARY TO THE COUNCIL—JENKIN JAMES, O.B.E., M.A.

## CONSTITUENT COLLEGES

UNIVERSITY COLLEGE OF WALES, ABERYSTWYTH.

UNIVERSITY COLLEGE OF NORTH WALES, BANGOR.

UNIVERSITY COLLEGE OF S. WALES AND MONMOUTHSHIRE, CARDIFF.

UNIVERSITY COLLEGE OF SWANSEA.

## ASSOCIATED THEOLOGICAL COLLEGES

UNITED THEOLOGICAL COLLEGE, ABERYSTWYTH AND BALA. At *Aberystwyth*: Principals—Owen Prys, M.A., D.D., Prof. of *Syst. Theol.* and *Philos. of Religion*; J. O. Thomas, M.A. (Acting Principal), Prof. of *N.T. Greek* and *Exegesis*. Other Profs.: J. Y. Evans, M.A., B.D., *Eccl. Hist.*; E. N. Jones, M.A., *Hebrew* and *O.T. Exegesis*; W. Porter, M.A., *Litt.D.*, *Bib. Lit.* and *Theol.*; R. Morris, M.A., B.D., *Hist. of Christ. Doct. and of Religion in Wales*. At *Bala*: Principals and Profs. of *Past. Theol.*—David Phillips, M.A., and D. Williams, M.A.

BANGOR, The Baptist and Congregational Jt. School of Univ. Theol. Studies. Principals—S. Morris, M.A., Prof. of *N.T. Canon*, etc., and T. Rees, M.A., Prof. of *Christ. Doct.*, etc. Other Profs.: J. T. Evans, M.A., B.D., *Hebrew*, etc.; J. M. Jones, M.A., *Ch. Hist.*, etc.; T. Rhys, B.A., *N.T. Greek*, etc.

BRECON, The Memorial Coll. Principal—T. Lewis, M.A., B.D., Prof. of *Hebrew*. Other Profs.: D. M. Edwards, M.A., *Dogmatics*, etc.; Jos. Jones, M.A., B.D., *Greek*, etc.; John Evans, B.A., *Ch. Hist.*

CARDIFF, The S. Wales Baptist Coll. Principal—W. Edwards, B.A., D.D., Prof. of *N.T. Greek*, etc. Other Profs.: T. W. Chance, M.A., B.D., *Ch. Hist.*; J. M. Davies, M.A., *Philos.*, etc.; T. H. Robinson, M.A., D.D., *Hebrew*, etc.

CARMARTHEN, The Presb. Coll. Principal—W. J. Evans, M.A., Lectr. in *Classics*, etc. Other Lectrs. : Emrys Jones, B.A., B.D. ; M. B. Owen, B.A., B.D. ; J. O. Stephens, B.A., B.D.

## GENERAL INFORMATION

Founded by Charter, 1893, the Univ. has no teaching staff, the teaching for initial degrees being undertaken by the constituent Colleges, independent bodies with separate charters and government, to one of which every undergraduate must belong. The Univ. prescribes conditions under which it awards initial degrees to students of the Colleges and conducts the Final exams. An Academic Advisory Committee deals with the conditions on which School Leaving certificates are accepted by the Univ. for matriculation, and as relieving a student from repeating in College work done in Secondary Schools, and with other matters lying in the borderland between School and Univ.

As the result of an inquiry held by a Royal Commission in 1916-1918, a Supplemental Charter was granted to the Univ. in 1920, which introduced many important changes, including : reconstruction of the Univ. Court, a deliberative and legislative body, with 263 members, of whom a little over a half are representatives of Local Education Authorities ; institution of a Univ. Council, as the executive and administrative body of the Univ., controlling the finance and distributing all the funds provided for Univ. Education ; provision of such funds from a penny rate levied throughout Wales and Monmouthshire, supplemented by an equivalent grant from the Treasury ; larger freedom for the constituent Colleges (now increased to four, by the inclusion of Swansea) in the control of the Courses of Study and in the conduct of their own exams. for initial degrees, Univ. Examiners now taking part only at the final stage ; development of a National School of Medicine in connexion with Cardiff College ; new Boards for special studies, such as the Board of Celtic Studies and the Council of Music ; Univ. Press Board ; enlarged scheme for extra-mural instruction.

DEGREES. B.A., M.A., Ph.D., D.Litt. ; B.Sc., M.Sc., Ph.D., D.Sc. ; B.Mus., M.Mus., D.Mus. ; LL.B., LL.M., LL.D. ; M.B., B.Ch., M.D. ; B.D., D.D.

The minimum period of study for a first degree is 3 yrs. In Music the 3rd yr. may be in any approved Coll. of Music. The degree in Med. is only open to a graduate in Arts or Science of some British or approved colonial or foreign Univ. ; the period of qualification for it is 6 yrs., of which the last 3 may be spent in an approved School of Med. in the U.K. or in one of the Univs. of Paris, Berlin, Vienna, or the Johns Hopkins Univ. The degree of B.D. (3 yrs.' course) is post-graduate ; the scheme of study is pursued in one of the Associated Theol. Colls. (v. p. 189). The qualifying period of study for the LL.B. is 4 yrs., reducible by 1 in the case of a candidate who has qualified for a degree in any Univ. in the U.K. The M.A., M.Sc., and LL.M. may be awarded to graduates of other Univs. approved for this purpose who pursue a scheme of research for at least 2 yrs. in one of the Constituent Colls. As regards Ph.D., see p. 15.

*Diplomas* in Educn. (post-grad. Certif. and Diploma) ; Public Health (D.P.H.) ; Tuberculous Diseases (T.D.D.).

FEES : Matricn., £2 (graduates of other Univs. exempt) ; exams. qualifying for Bachelor degree, from £6 : 15s. ; Master, £8 ; Doctor, £16.

SCHOLARSHIPS, ETC., FOR GRADUATES. The Univ. has funds amounting to £2000 p.a. for the encouragement of research. In addition to 6 Fellowships,

it awards studentships on the nomination of the Colls. to students who after graduation in Arts or Science engage in work preparatory to research for 1 or 2 yrs.

APPOINTMENTS BOARD for Wales (Secy., D. B. Anthony, M.A., Univ. Registry, Cathays Park, Cardiff) has been taken over by the Univ. from the Appointments Assocn. for Wales as one of the University Boards.

PUBLICATIONS: *Calendar* (Dec.), 5s. Courses in Div. and Matricn. and Degree Regns., free. Matricn. Examn. Papers, 6d. B.D. Questions, 6d. Degree Papers, Arts 6s., Science, 5s. Bulletin of Board of Celtic Studies, 5s. Publns. of the Council of Music.

## THE YEAR 1922

HONORARY DEGREES CONFERRED. D.Lit.—Profs. J. E. Lloyd and Foster Watson; LL.D.—Sir E. Vincent Evans, Sir A. Garrod Thomas, Sir T. Middleton, the Rt. Hon. Lord Pontypridd; D.Sc.—Sir E. J. Russell; D.D.—The Rev. Principal O. Prys; M.A.—J. O. Francis, Richard Morgan, the Rev. W. Jenkyn Jones, Edgar Jones, Catherine Davies; M.Sc.—H. H. Humphreys.

OTHER DEGREES. B.A., 290, including 109 women; B.Sc., 245 (29 w.); LL.B., 3 (1 w.); B.Mus., 4 (1 w.); M.B., B.Ch., 2 women; B.D., 3; M.A., 15 (3 w.); M.Sc., 12 (1 w.); D.Litt., 1; D.Sc., 3.

*Certificates and Diplomas awarded.* Certificate in Educn., 58 (38 w.). Tuberculous Diseases Diploma (T.D.D.), 1.

CHANGES IN REGULATIONS, ETC. Regns. for a Tuberculous Diseases Diploma were approved. It was decided that the Second Class in Honours should be divided into a First and a Second Division, and that graduates whose names have been included in the First Division be reported upon as having secured a good Honours degree for the purposes of the Burnham scale of salaries in schools.

UNIVERSITY FACULTIES AND COMMITTEES. The Faculties of Law and Music were reconstituted, and the Univ. Extension Board and Press Board were created in accordance with the new Charter and Statutes of the Univ.; the Faculty of Technology was established; Schemes and courses of study for the degree of B.Tech. are being organized.

UNIVERSITY APPOINTMENTS BOARD. The number of appointments obtained through the Board was 222, including 11 foreign apptmts.

# UNIVERSITY COLLEGE OF WALES, ABERYSTWYTH

PRESIDENT OF THE COURT OF GOVERNORS AND OF THE COUNCIL—Sir

JOHN WILLIAMS, Bart., G.C.V.O., M.D., D.Sc.

PRINCIPAL—J. H. DAVIES, M.A. Ox.

GENERAL SECRETARY—C. G. BURTON.

ACADEMIC SECRETARY—G. J. WALKER.

LIBRARIAN—J. D. WILLIAMS, B.A.

SENIOR WARDEN OF THE HALLS OF RESIDENCE FOR WOMEN STUDENTS

—Miss C. P. TREMAIN, B.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Agriculture*

Jones, Abel E., B.Sc. Prof.  
Phillips, R., B.Sc. Lectr.  
County Organizers, 5.  
Instructors in Horticulture, 2.  
Instructresses in Dairying, 6.

### *Agric. Botany*

Stapledon, R. G., M.B.E., M.A. Prof.  
Camb. Prof.  
Sampson, Kathleen, M.Sc. Lond. Lectr.  
Tincker, M. A. H., B.A. Camb., B.Sc. Lond. Asst. Lectr.

### Plant Breeding Station :

Prof. Stapledon Director.  
Research Workers in charge of investigations :  
Jenkin, T. J., M.Sc.  
Williams, R. D., B.Sc.

### Research Asst. :

Jones, Martin G., B.Sc.

### *Agric. Chemistry*

Griffith, J. J., B.Sc. Indept. Lectr.  
Fagan, T. W., M.A. Camb., F.I.C. Adviser.  
Davies, R. O., B.Sc. Asst. Lectr.

### *Arabic, v. Hebrew*

### *Botany*

Williams, J. Lloyd, D.Sc. (also Lectr. in Music) Prof.  
Jones, S. G., M.Sc. Lectr. & Demr.  
Fry, Miss E. J., M.Sc. Asst. Lectr.  
Walters, Miss G. A., B.Sc. Asst. Lectr.

### *Chemistry*

James, T. C., M.A. Camb., D.Sc., F.I.C. Prof.  
Hudleston, L. J., M.Sc., A.I.C. Lectr.  
Bury, C. R., B.A., B.Sc. Ox., A.I.C. Lectr.  
Asst. Lectrs. & Demrs. :  
Cullinane, N. M., M.Sc., N.U.I., A.I.C.  
Davies, C. W., B.Sc., A.I.C.  
Roberts, H. Medwyn, B.Sc., A.I.C.  
Green, Albert, B.Sc., A.I.C.

### *Classics*

Marshall, J. W., M.A. Glas. and Ox. (Greek) Prof.  
Rose, H. J., M.A. Ox., B.A. McG. (Latin) Prof.  
Jenkins, E. D. T., M.A. Ox. Lectr.  
Hignett, C., B.A. Ox. Lectr.  
Asst. Lectrs. :  
Woodward, Miss A., M.A. Lond.  
Pope, R. A., M.A. Camb.

*Domestic Science*

Fisher, Miss N. Instructress.

*Economics and Pol. Science, v.  
also Politics* [Prof.

Lewis, E. A., D.Sc. Lond., M.A.,  
D.Litt. (Lectr. in Palæog.)

Rees, J. Morgan, M.A. Lectr.

King, William, M.A. Asst. Lectr.

*Education*

Chapple, C. R., M.A. Lond. Prof.

Roberts, Dorothy E., M.A. Lectr.

Smith, Frank, M.A. Camb., B.A.,  
B.Sc. Manc. Lectr.

Hughes, John, B.A. Asst. Lectr.

Jones, Gwenan, M.A., Ph.D. Minn.  
Asst. Lectr.

Green, G. H., B.Sc. Lond., B.Litt.  
Ox. Asst. Lectr.

Rowlands, M. Gertrude  
Asst. Lectr.

Jones, Dan R., A.R.C.A., A.M.C.  
Art Master.

*Instrs. in Physical Training :*

Stimson, Capt. H. F.

Davidson, Miss M.

*English Language and Lit.*

Atkins, J. W. H., M.A. Camb. and  
Lond. Rendel Prof.

Winstanley, Lilian, M.A. Manc.  
Lectr.

Garmonsway, G. N., B.A. Camb.  
Asst. Lectr.

Thomas, R., M.A. Asst. Lectr.

*French Lang. and Lit. and  
Romance Philol.* [Prof.

Barbier, J. L. A., L. ès-L. Paris

Thomas, A. B., D. de l'U. Lyon,  
M.A. Lectr.

Owen, Annie, B.A. Asst. Lectr.

Phillips, Eva M., B.A. " "

*Geography*

Fleure, H. J., D.Sc. Prof.

Whitehouse, W. E., M.Sc. Lectr.

Harris, Susan Asst. Lectr.

*Geology*

Pugh, W. J., O.B.E., B.A. Prof.

Challinor, J., B.A. Camb. Lectr.

Platt, J. I., B.Sc. Manc.

Asst. Lectr.

*German*

Evans, David, M.A. Indpt. Lectr.

Rees, Hermia, M.A. Asst. Lectr.

*Hebrew and Arabic*

..... Prof.

*History*

Edwards, Ed., M.A. Camb. and  
Lond. Prof.

Jane, L. C., M.A. Ox. Lectr.

James, T. J., M.A. Asst. Lectr.

*History, Colonial* [Prof.

Roberts, T. Stanley, M.A. Camb.

*Law, English* [Prof.

Levi, T. A., M.A., B.C.L. Ox.,  
LL.B. Lond., Barr.-at-Law

Lewis, Malcolm M., M.A., LL.B.  
Camb. Lectr.

Parry, D. Hughes, B.A., LL.B.  
Wales and Camb. Asst. Lectr.

*Logic and Philosophy*

Jones, W. Jenkyn, M.A. Camb.,  
B.A. Lond. Prof.

Reid, L. A., M.A. Edin. Asst. Lectr.

*Mathematics, Pure*

Young, W. H., M.A., Sc.D. Camb.,  
F.R.S. Prof.

Johnston, W. J., M.A. Belf., B.A.  
Dub. Asst. Prof.

Walmsley, C., B.A. Camb.  
Asst. Lectr.

Dienes, P., D.Sc. Paris Asst. Lectr.

*Mathematics, Applied*

Schott, G. A., B.A. Camb.; D.Sc.  
Lond. Prof.

Sutton, W. G. L., B.A. Camb.  
Asst. Lectr.

*Music, v. also Botany*

Davies, Sir H. Walford, Mus.D.  
Camb., LL.D. Leeds, F.R.C.O.

Prof.

de Lloyd, David, Mus.D. Dub., B.A., Mus.B. Lectr.	<i>Welsh</i> Parry-Williams, T. H., M.A. Wales, B.Litt. Ox., Ph.D. Freib. Prof.
9 Assts.	
<i>Oceanography</i> Jenkins, J. Travis, B.Sc. Lond., Ph.D. Kiel, D.Sc. Hon. Lectr.	<i>Welsh Literature</i> Jones, T. Gwynn, M.A. Prof. Lewis, Timothy, M.A. Manc., B.A. Reader (Celtic Philol. and Palæog.).
<i>Palæography</i> , v. Econ.	
<i>Philosophy</i> , v. Logic	
<i>Physics</i> Owen, Gwilym, M.A. Camb., M.Sc. Manc., D.Sc. Liv. Prof.	<i>Zoology</i> , v. also Ocean. Laurie, R. D., M.A. Ox. Lectr.
Tunstall, N., B.Sc. Manc. Lectr.	Thompson, Miss M., M.Sc. Asst. Lectr.
Asst. Lectrs. & Demrs.:	Watkin, E. E., B.Sc. Asst. Lectr.
Sulston, L. E.	Horsman, Miss E., M.Sc. Liv.
Mandell, W., B.Sc. Lond.	Fisheries Naturalist.
West, J., B.Sc. Manc.	
<i>Politics, Internat.</i> Webster, C. K., M.A. Prof.	<b>Adult Education</b> Morgan, Herbert, M.A. Bris.
Herbert, S. Lectr.	Director of Extra-mural Studies.

## GENERAL INFORMATION (v. also p. 190)

Founded in 1872, the College was incorporated by Royal Charter in 1889, and is a Constituent College of the Univ. of Wales. Its main building and Students' Hostels are on the sea front, facing Cardigan Bay.

**LIBRARIES.** College, 41,000 vols., including the collection of Sir John Rhys. Access to the National Library of Wales, founded in 1905, 250,000 vols., rich in Welsh and other Celtic books and MSS. **MUSEUMS:** Archæol., Bot., Chem., Ethnog., Geog., Geol., Zool. The Chemistry **LABORATORIES**, erected in 1907, are the most complete in Wales. Agric. Expl. and Plant-breeding Stations and Training Farm.

**DEPARTMENTS.** Arts and Science (including International Politics), Agriculture, Law, Music, Teaching (Elem. and Secondary). A special feature is the ample provision for instruction and research in Agriculture. A Chair of International Politics was founded in 1919.

**DEGREE** courses in Arts, Science, Law, Music.

*College Diploma* courses: Associateship, 2 yrs.; Assoc. in Agric., 3 yrs.; Dairying, 2 yrs.

Courses in Science meet the requirements of the first year of Medical study and the examns. of the Pharmaceutical Society.

Post-graduate courses (1 yr.) for Teachers (Elem. and Secondary), and in Agric.

**RESEARCH** work is systematically carried on in Agric. Botany and Agric. Chem. (whole-time Research Botanist, Chemist, Entomologist, and Mycologist), Chem., Geol., Physics, Zool., etc.



FEES for tuition in Arts, £17 per session ; Science, £21. Research students, 5 to 8 gs.

SCHOLARSHIPS FOR GRADUATES. 4 for Research, value £27 to £70, open to Colonial and Foreign students as well as to students of the College. *See* also under Univ. TRAVELLING SCHOLARSHIPS for visiting Continental institutions, average, £20 to £30 ; total, £500.

RESIDENCE. Board and lodging at Hostels: men—55 gs., women—50 to 62 gs. per session. Accommodation in Hostels for 60 men and 300 women.

UNIVERSITY EXTENSION. Local lectures and short courses in Agric. subjects ; Travelling Dairy School ; Tutorial Classes in Econ., Lit., Hist., Welsh Psychology, etc. ; Summer School annually in Aug.

AFFILIATION. The Coll. is affiliated to Ox. and Camb., and is recognized by Edin. and N.U.I., by the R.C.P. and S. Eng. and Edin., the F.P. & S. Glas., the R.C.P.I., the Inst. Chem., and the Surveyors' Instn.

PUBLICATION: *Calendar* (Jan.), 1s. 6d.

## THE YEAR 1921-22

BENEFACTIONS. Music Scholarships, £50. Old students of the College purchased the freehold of a large building and presented it for a Students' Union.

NEW DEVELOPMENTS. Travelling Scholarships to enable Students to visit Educational Instns. on the Continent. Course of Special Historical Lectures during Summer Term.

ADDITIONS TO BUILDINGS, ETC. University Hall, to accommodate 3000 people.

NUMBER OF STUDENTS. Full-time preparing for Bachelorship or Diploma—1001, including 298 women. Part-time, 75. Research, 21. New for 1922-23, 201.

NUMBER OF DEGREES OBTAINED. B.A., 129 ; B.Sc., 93 ; M.A., 7 ; D.Sc. and M.Sc., 3 ; LL.B., 2 ; B.Mus., 1.

UNIVERSITY TUTORIAL CLASSES held in 29 centres, attended by 435 three-year and 149 preparatory class students. 16 and 45 students attended Summer Schools of Biology and Library Service respectively.

RETIREMENTS. O. H. T. Rishbeth, apptd. Reader at Univ. College, Southampton ; W. Ritchie, apptd. Assistant Lectr. in Biology at Bradford Tech. College ; H. W. Unthank, Miss K. E. Carpenter, Miss M. L. Gordon, H. Bonny, D. W. Pugh.

## UNIVERSITY COLLEGE OF NORTH WALES, BANGOR

PRESIDENT OF THE COURT OF GOVERNORS AND CHAIRMAN OF THE  
COUNCIL—Rt. Hon. LORD KENYON, K.C.V.O.

PRINCIPAL—Sir HARRY R. REICHEL, M.A., LL.D.

SECRETARY AND REGISTRAR—W. P. WHELDON, M.A., LL.B.

BURSAR—RICHARD WILLIAMS.

WARDEN OF THE WOMEN STUDENTS—MURIEL O. DAVIS.

### PROFESSORS, LECTURERS, ETC., January 1, 1923

#### *Agriculture*

White, R. G., M.Sc. Leeds Prof.  
Roberts, E. Jones, B.Sc.

Asst. Lectr.

Lectrs. in Bldg. Constn., Book-  
keeping, Vet. Hygiene.

County Staffs: 4 Organizers;  
Instructors in Cheesemaking,  
Dairying, Horticulture and  
Poultry-keeping

#### *Agric. Botany*

Roberts, R. Alun, B.Sc. Adviser.  
Whitehead, T., A.R.C.S.

Adviser in Plant Pathology.

..... Asst. Lectr.

#### *Agric. Chemistry*

Robinson, G. W., M.A. Camb.  
Adviser and Lectr.

McLean, W., B.A., B.Sc.,  
A.R.C.Sc.I., A.I.C. Lectr.  
Williams, Rice, B.Sc. Asst. Lectr.

#### *Agric. Entomology*

Walton, C. L., M.Sc. Adviser.

#### *Botany*

Phillips, R. W., M.A. Camb., D.Sc.  
Lond., F.L.S. Prof.

Davey, A. Jane, M.Sc. Lond.  
Lectr.

Purvis, Nora, M.Sc. Asst. Lectr.

#### *Chemistry*

Orton, K. J. P., M.A. Camb.,  
Ph.D., F.R.S., F.I.C. Prof.

Watson, H. B., B.Sc. Lectr.  
Soper, F. G., B.Sc.

Lectr. in Physical C.

Asst. Lectrs. & Demrs.:

Roberts, I. C., B.Sc.

Hunter, L., B.Sc. Lond.

#### *Classics*

Hudson-Williams, T., M.A., D.Lit.  
Lond. (Greek) Prof.

Arnold, E. V., Litt.D. Camb.  
(Latin) Prof.

Whatmough, J., M.A. Manc. Lectr.

Lees, Miss M. E., M.A. Manc.  
(Latin) Asst. Lectr.

Morris, S., M.A.  
Spl. Lectr. for Theol.  
Students.

#### *Economics*

..... Lectr.

#### *Education*

Archer, R. L., M.A. Ox. Prof.  
Paterson, Alice, M.A. Edin., Ph.D.

Jena Lectr.

Williams, Ivor Asst. Lectr.

Thomas, Miss M. Asst. Lectr.

Hamilton, C. R., M.A., B.Sc.  
Asst. Lectr.

Instructors in Drill, Handwork,  
and Rural Sc.

#### *English Lang. and Lit.*

Wright, H. G., M.A. Manc. Prof.

- King, R. W., M.A. Lond. Asst. Lectr.  
 Isaacs, J., B.A. Ox. Asst. Lectr.  
*Forestry*  
 Thomson, T., B.Sc. Lectr.  
*French and Rom. Philol.* [Prof.  
 Fynes-Clinton, O. H., M.A. Ox.  
 Cariou, Mlle., L. ès L. Asst. Lectr.  
*German and Teut. Philol.*  
 Purdie, Edna, M.A. Liv. Lectr.  
*History* [Prof.  
 The Principal (Constitutional H.)  
 Lloyd, J. E., M.A., D.Lit. Ox.  
 (Lectr. in Church H.) Prof.  
 Turberville, A. S., M.A., B.Litt.  
 Ox. Lectr.  
 Shankland, Rev. T., M.A. (Mod.  
 Welsh H.) Reader.  
 Dodd, A. H., M.A. Ox. Asst. Lectr.  
 Jones, J. Morgan, M.A.  
 Spl. Lectr. in Church  
 H.; External Lectr.  
 in Christian Ethics.  
*Logic and Philosophy*  
 Gibson, J., M.A. Camb. Prof.  
 Lewis, Miss G. A., M.A. Lectr.  
 Lazarus, S. C., B.A. Melb.  
 Asst. Lectr.  
*Mathematics*  
 Bryan, G. H., Sc.D. Camb.,  
 F.R.S. Prof.  
 Veitch, Mrs. E. B., M.Sc. Lectr.  
 Ferrar, W. L., M.A. Ox. Lectr.  
*Music*  
 Davies, E. T., F.R.C.O. Director.  
 4 Executants and Teachers.  
*Philosophy*, v. Logic  
*Physics* [Prof.  
 Jones, E. Taylor, D.Sc. Lond.  
 Mainstone, P. A., M.Sc. Lectr.
- Williams, W. Ellis, B.Sc.  
 Lectr. in Applied Electricity.  
 Partridge, C. F., B.Sc. Asst. Lectr.  
 Asst. Lectr. & Demr. :  
 Jones, H. Irvon, B.Sc.  
*Semitic Languages*  
 Robertson, E., M.A., B.D., D.Litt.  
 Edin. Prof.  
 Evans, Prof. J. T., M.A., B.D.  
 Spl. Lectr.  
*Theology*, v. also Classics, Hist.,  
 Semitic  
 Rees, T., M.A., Ph.D.  
 Spl. Lectr. in Philos.  
 Theism; External Lectr.  
 in Christian Doctrine  
 Rhys, T., B.A.  
 External Lectr. in New  
 Test.  
 Webb, Clement, M.A. Ox.  
 Spl. Lectr.  
*Welsh*  
 Morris-Jones, Sir J., M.A. Ox.,  
 LL.D. Prof.  
 Williams, Ifor, M.A.  
 Prof. of W. Lit.  
 Parry, R. W., M.A. Asst. Lectr.  
*Zoology*  
 White, P. J., M.B. Edin. Prof.  
 Thorpe, Laura, B.Sc. Asst. Lectr.
- Adult Education**  
 Tutorial Class Organizer and  
 Lectr. :  
 .....  
 Whole-time Lectrs :  
 Jones, E. J., B.A.; Roberts, R.  
 Silyn, M.A. Many other  
 members of the Staff give  
 single courses or combine in  
 giving a series.

## GENERAL INFORMATION (v. also p. 190)

This College, constituted by Royal Charter in 1885, was made a constituent College of the Univ. in 1893.

The Physics and Chemistry buildings and the Biology laboratory were opened in 1885, and extended in 1892 to provide for Zoology and Agriculture, and in 1911 the Arts dept. was removed to a site, in the heart of the city, of

over 10 acres, given by the Corporation. The buildings, including the Great Hall, were opened in 1911 by King George.

**LIBRARIES.** General, 50,000 vols. Welsh, 15,000, including the largest and best-equipped collection of Welsh periodicals in existence. **MUSEUMS** include special collections of fish, shell-fish, and fishing gear and Welsh antiquities. **FARM**, 675 acres, chiefly sheep pasturage. **Dairy**.

Special facilities are offered for research in Welsh Language and Literature, Political, Social, Economic, and Religious History of Wales, and allied subjects.

**COURSES.** B.A. degree courses include among others a "special scheme of study based on the idea of citizenship." There are courses in Theology for B.D. degree, and full courses for the B.Sc in Agric. and Rural Economy, Forestry, and Applied Electricity, as well as in Pure Sc.

College *Diploma* courses in Agric. (3 yrs.), and in Forestry and Elec. Engineering (2 years). The Agric. course is recognized by the Surveyors' Instn. as qualifying for Students' Proficiency examn. Other courses: First year of Med. study; 1 yr. post-graduate course for Teachers (Elem. and Secondary); for Kindergarten Certif.—Elem. 1 yr., Higher 2 yrs. and 1 term. Shorter courses in Agric. and Dairy work by itinerant lecturers.

**FEES.** Registration, 1 g. per session. Tuition, per session: Arts, £12; Science, £16; Medicine, 1st year (including lab.), £18; Post-graduate courses, non-lab., 4 gs.; with lab., £8; Agric., diploma course, per winter session, £15: 15s. (2 terms); Farm Practical Instruction, £5 (or 2 gs. a term). All fees will be increased next session (1923-24).

**SCHOLARSHIPS, ETC., FOR GRADUATES.** Several College awards ranging in value from £22 to £50, open to students of the College. See also under Univ.

**RESIDENCE.** Hostels for 35 men (£47 p.a.) and 180 women. Total cost of living in lodgings and tuition in Bangor, from £55 to £65 per session (1922).

**UNIVERSITY EXTENSION, ETC.** Local lectures in Literature, Econ., and Agric.; small lending libraries; Tutorial Classes, chiefly for slate-quarrymen and miners. The Advisers in Agriculture conduct experiments and give expert advice to farmers and others.

**PUBLICATIONS.** *Calendar* (Sept.), 2s. 6d.; *Students' Handbook*, 1s.; *College Magazine*, one issue per term, 1s.; Prospectus free.

## THE YEAR 1921-22

**NEW DEVELOPMENTS.** New Faculty of Theology; special lectures in Geology; and special lectures in Literature and Art (Ballard Mathews Endowment).

**EXTRA-MURAL WORK.** 17 Tutorial and Preparatory Classes. Substantial support from N. Wales Miners' Federation and Quarrymen's Union.

**NUMBER OF STUDENTS (1921-22).** Total—672. Preparing for degrees—470; for diplomas—167, including those in Elem. Training Dept. taking 1 yr. course; research—13; occasional—22. Women included in above—241. Nine from foreign Univs.

**DEGREES OBTAINED (1921-22).** B.A.—68; B.Sc.—69; D.Litt., M.A., M.Sc., Ph.D., and D.Sc.—7.

**DEATHS.** W. Lewis Jones, Prof. Emeritus; G. B. Mathews. **RESIGNATIONS.** B. E. Hughes; Mlle. J. Perrier; John Rees, on apptmt. to Cardiff; H. Sturt, W. Hughes, and R. D. Rowlands, on expirn. of temp. apptmts.; R. Richards, on election as M.P.; J. H. Jones, on apptmt. to post in King's Coll., London.

# UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE, CARDIFF

PRESIDENT—The Rt. Hon. LORD GLANELY.

TREASURER—Sir D. R. LLEWELLYN, Bart.

PRINCIPAL—A. H. TROW, D.Sc. Lond., F.L.S.

REGISTRAR—D. J. A. BROWN.

LIBRARIAN—S. O. MOFFET, M.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

*Agriculture* [Adviser in Agr. Bot.  
Rees, J., B.A., B.Sc.  
Bisset, N., M.R.C.V.S., F.Z.S.  
Adviser in Vet. Sc.

*Anatomy*  
Hepburn, D., C.M.G., V.D., M.D.,  
C.M. Edin. Prof.  
Davies, D. L., M.D., M.S. Lond.,  
F.R.C.S. Asst. Lectr. & Demr.  
Evans, H., M.A., D.M. Ox., M.B.,  
B.S., M.R.C.P. Lond. Demr.  
Jones, A. M., M.D. Edin. Demr.  
Wade, J. O. D., M.B., B.S. Lond.,  
F.R.C.S. Demr.

*Archæology*  
Wheeler, R. E. M., M.A., D.Lit.  
Lond. Lectr.

*Architecture*  
Purchon, W. S., M.A. Lond.,  
A.R.I.B.A. Lectr.

*Botany*  
McLean, R. C., M.A. Camb., D.Sc.  
Lond., F.L.S. Prof.  
Asst. Lectrs. & Demrs.:  
Crow, W. B., M.Sc. Lond., F.L.S.  
Holmes, Marion G., M.Sc. Lond.

*Chemistry* [Prof.  
Jones, W. J., D.Sc. Manc., F.I.C.  
Perman, E. P., D.Sc. Lond.,  
F.I.C., F.C.S. Asst. Prof.  
Bassett, H. Ll., M.A. Camb.,  
B.Sc. Lond., A.I.C. (Organic  
C.) Lectr.  
Rea, Florence W., B.A., M.Sc.  
Belf. Asst. Lectr. & Demr.  
& Lectr. for Med. students.

*Classics*, v. also German [Prof.  
Norwood, G., M.A. Camb. (Greek)  
Freeman, Kathleen, B.A.

Asst. Lectr.  
Davies, Gwilym A. T., M.A. Ox.,  
B.A. (Latin) Prof.  
Grundy, W. W., M.A. Camb.  
Lectr.

*Economics and Pol. Science*  
Roberts, W. J., M.A. Ox.  
Fulton Prof.  
Evans, R. T., B.A. Lectr.

*Education*  
Phillips, W., M.A. Prof.  
Foxley, Barbara, M.A. Dub. Prof.

Training Depts.: [Lectr.  
Watkins, S. H., Ph.D. Leip., M.A.  
Saxby, Ida B., D.Sc. Lond. Lectr.  
Smith, Annie Lectr.

Asst. Lectrs.:  
Jones, E. J., M.A. Asst. Lectr.  
Barke, Ethel M., M.A. Dub.  
Amos, A. D., B.Sc. Lond.  
Flight, Miss E. G. Teacher in Art.

*Engineering*  
Sutton-Pippard, A. J., M.B.E.,  
D.Sc. Bris., A.M.I.C.E.,  
F.R. Aero. S. Prof.  
Thomas, S., B.Sc., A.M.I.E.E.  
Lectr.  
Miller, C. V., B.Sc. Lond., A.C.G.I.  
Asst. Lectr. & Demr.  
Foster, P. F., A.M.I.M.E.  
Asst. Lectr. & Demr.

*English Lang. and Lit.*  
 Brett, C., M.A. Ox. Prof.  
 McLean, Miss C. M., M.A. Edin.  
 Asst. Lectr.

*French*  
 Watkin, M., M.A., L. ès L. Ren.,  
 Ph.D. Zur., O.I.P. Prof.  
 Jones, P. Mansell, M.A. Lectr.

*Geology*  
 Cox, A. H., D.Sc. Birm., Ph.D.  
 Stras., F.G.S. Prof.  
 Asst. Lectrs. and Demrs:

Dingwall, Miss J. M. M., M.A.,  
 B.Sc. Edin.  
 Heard, A., M.Sc. Manc., F.C.S.

*German*  
 Arnold, F. T., M.A. Camb. (Asst.  
 Lectr. in Latin) Lectr.

*Histology, v. Physiol.*

*History* [Prof.  
 Bruce, H., M.A. Ox., F.R.H.S.  
 Rees, Wm., D.Sc. Lond., M.A.,  
 F.R.H.S. Asst. Lectr.

*Hygiene and Public Health, v. infra*

*Mathematics*  
 Livens, G. H., M.A. Camb. Prof.  
 Taylor, D. G., M.A. Camb. and  
 Glas., D.Sc. Glas. (Pure M.)  
 Lectr.  
 Pope, A. H., B.Sc. Lond.  
 Asst. Lectr.

Hayden, H. A., B.Sc. " "

*Medicine, v. infra*

*Metallurgy*  
 Read, A. A., D.Met. Sheff., F.I.C.,  
 F.C.S. Prof.  
 Asst. Lectrs. & Demrs.:  
 Jones, W. R. D., M.Sc.  
 Handford, C., M.Met. Sheff.

*Mining* [Lectr.  
 Price, S. W., A.R.S.M., M.I.M.E.

*Music*  
 Evans, D., Mus.D. Ox. Prof.  
 Lloyd, J. Morgan, Mus.B. Dub.  
 Asst. Lectr.

*Philosophy, Logic and* [Prof.  
 Scott, J. W., M.A., D.Phil. Glas.  
 Thorburn, J. M., M.A., B.Sc. Edin.  
 B.A. Lond. Asst. Lectr.

*Physics*  
 Selby, A. L., M.A. Ox. Prof.  
 Shaxby, J. H., B.Sc. Lond. Lectr.  
 Asst. Lectrs. & Demrs.:  
 Armishaw, Jean C., M.A., B.Sc.  
 Glas.

Young, C. L., B.Sc.  
 Harker, G. H., B.A. Camb.

*Physiology, v. also Zool.*  
 Brown, T. Graham, M.D., D.Sc.  
 Edin. Prof.  
 Burlend, T. H., M.A. Camb., B.Sc.  
 Lond. (Histol. & Embryol.)  
 Lectr.  
 Pryde, J., B.Sc. St. And. (Lectr.  
 in Physiol. Chem.)  
 Asst. Lectr. and Demr.

*Semitic Languages*  
 Robinson, T. H., M.A. Camb.,  
 D.D. Lond. Lectr.

*Welsh*  
 Gruffydd, W. J., M.A. Ox. Prof.  
 Williams, G. T., M.A. Asst. Lectr.

*Zoology, v. also Physiol.* [Prof.  
 Tattersall, W. M., D.Sc. Liv.  
 Lloyd, J. H., M.Sc. Birm. Lectr.  
 Sheppard, Edith M., B.Sc. (Asst.  
 in Histol.)  
 Asst. Lectr. & Demr.

**Medicine, Welsh National School**  
 of (for subjects of first 2 yrs.  
 —Anat., etc., v. *supra*)

*Anæsthetics*  
 Greaves, H. G., M.B. Camb. Lectr.

*Ear, Nose, and Throat, Diseases of*  
 Paterson, D. R., M.D., Ch.M. Edin.  
 Lectr.

*Gynæcology and Obstetrics* [Prof.  
 Maclean, E. J., M.D., Ch.M. Edin.  
 Strachan, G. I., M.D. Glas.,  
 F.R.C.S. Asst.  
 Collins, B. K. T., M.A., M.D.  
 Camb. Asst.

*Medicine*

Kennedy, A. M., M.D. Edin. Prof.  
 Evans, H. T., M.A., D.M. Ox.,  
 M.B., B.S. Lond. Asst.  
 Davies, I. J., M.D. Lond. Asst.

*Mental Diseases*

Goodall, Edwin, C.B.E., M.D.  
 Lond. Lectr.

*Ophthalmology*

Cresswell, F. P. S., B.Sc., M.B.,  
 B.S. Lond., F.R.C.S. Lectr.

*Pathology and Bacteriology*

Emrys-Roberts, E., M.D. Liv.,  
 M.B., Ch.B. Manc. Prof.  
 Haig, H. A., M.B., B.S. Lond.,  
 D.P.H. Lectr.

*Pharmacology, Mat. Med. and*

Stevens, W. M., M.D. Lond.,  
 F.R.C.P. Lectr.  
 Beatty, J., M.A., M.D. Dub.,  
 D.P.H. Asst. Lectr.

*Surgery*

Sheen, A. W., C.B.E., M.S., M.D.  
 Lond., F.R.C.S. Prof.  
 Grant, J. W. Geary, F.R.C.S. Asst.

Hammond, T. E., F.R.C.S. Asst.  
 Haycraft, J. B., Jr., M.B., Ch.B.  
 Edin., F.R.C.S. Asst.

*Tuberculosis*

[Davies Prof.  
 Cummins, S. L., C.B., C.M.G.,  
 B.Ch., B.A.O. N.U.I., D.T.M.  
 & H. Camb., LL.D., M.D.]

**Preventive Medicine and Public Health** [Talbot Prof.]

Collis, E. L., M.A., D.M. Ox.  
 Morgan, W. P., M.A., M.B. Camb.  
 Lectr. in *Bact. & Parasitology*

**Lectrs. in Hygiene and P.H. :**

Williams, E. C., M.D. Durh.,  
 D.P.H. Camb.  
 Picken, R. M. F., B.Sc., M.B. Glas.,  
 D.P.H. Camb.

**Lectr. in Hygienic Chemistry :**

Sugden, J. H., M.Sc. Manc., F.I.C.

**Adult Education**

Tutors, 16 (including a few  
 members of the College Staff).  
 Joint Secy.—D. J. A. Brown,  
 Regr.

**GENERAL INFORMATION** (v. also p. 190)

Opened in 1883 and incorporated by Royal Charter in 1884, this is now one of the constituent Colleges of the Univ. The Medical School was opened in 1894, the Engineering School in 1896. New College Buildings, containing the Arts and Administrative Blocks and the Drapers' Company's Library, were opened in Cathays Park (wherein the Univ. Offices are also located) in 1909, the Viriamu Jones Memorial Physical Research Laboratory in 1912. Physiological Dept. Buildings were completed and occupied in 1919, and formally opened in June 1921 by the Prince of Wales, who at the same time laid the foundation-stone of the buildings of the Dept. of Public Health and School of Preventive Medicine. In Oct. 1921 the development of the Medical School into the "Welsh National School of Medicine" enabled provision to be made for complete courses for a Degree or other qualification to practise Medicine.

**LIBRARY:** Drapers' Company's, 52,000 vols. **MUSEUMS:** Anat., Mat. Med., Path., Zool. The National Museum of Wales (Art, Archæol., Zool., Geol., Bot.) is located in an adjoining building. **LABORATORIES:** Physical Research, with liquid-air plant, etc.; Engineering (including roo-ton testing machine); and usual Science and Medical teaching and Research labs. King Edward VII. Hospital (300 beds) is within five minutes' walk of the College. Clinical facilities are available also in other local hospitals.

**FACULTIES.** Arts, Science, Medicine. **Departments:** Music, Applied Science and Technology, Teaching (Elem. and Secondary); School of Preventive Med. and Dept. of Pub. Health; an Advisory and Research Dept. in Agric. has been arranged for. **Short Course:** Midwifery (for midwives).

**COLLEGE DIPLOMAS.** Engineering, Metalliferous Mining, Metallurgy; Welsh Lang. and Lit.; Economics and allied subjects; Music; Social Study and Training. In the Applied Science subjects the qualifying scheme of study covers 3 years; in the other subjects, 2 yrs. A Joint Diploma in Coal Mining is granted by the Coll. and the S.W. and Monmouthshire School of Mines, 4 yrs.' residence being required. After a 4 yrs.' course students who desire to specialize in certain subjects can take a post diploma course. A Joint Diploma in Mech. Engin., Marine Engin., or Industr. Chem. is granted by this Coll. and the Cardiff Tech. Coll. after a 3 yrs.' course. The *Associateship* of the Coll. is given to students who attend the Coll. Classes for not less than 2 sessions, and who graduated at a Univ. in the U.K. or are otherwise qualified.

**AFFILIATION.** The Coll. is affiliated to Cambridge and (through the Univ. of Wales) to Oxford.

**SCHOLARSHIPS** (Prospectus obtainable from the Registrar). One of £60 is offered for research by a woman in any faculty, one of £50 (which may be increased by a bonus) for Science research. *See also* under Univ.

**FEES.** Annual Composition for tuition—Arts, £12; Science, £16; Music, £12; Applied Science, £16 (Non-associated Counties, £24); Medical, £21 to £40; Hospital practice, Perpetual Hospital ticket, £12:12s.; Research, 5 to 8 gs.; Registration, 1 g. p.a. These fees may be increased shortly.

**RESIDENCE.** 2 Hostels for women. Sessional Fees, £65 to £75. Board and lodging in the town can be obtained at about £2 per week.

**PUBLICATIONS.** *Calendar* (Feb.), 2s.; *Students' Handbook*; *Cap and Gown*.

## THE YEAR 1921-22

**BENEFACTIONS.** £4350 for Appeal Fund, including £1050 each from Barclay's Bank, and D. Radcliffe, £500 each from late Miss Marian Thompson's estate and J. H. Lewis, M.P., and £250 each from 4 Banks; for School of Mines, £100; Drapers' Co., £105; Dr. W. Price bequest, £11,975, and Dr. W. T. Edwards bequest, £550, for Sch. of Med.; Sir Wm. J. Thomas, Physiological Buildings (value £45,850); Mansel Talbot Chair of Preventive Medicine Fund, £37,500; Royal Agr. Show, £1107; I. Roberts and J. G. Jones, £100 each.

**NEW DEVELOPMENTS.** Welsh National School of Medicine established Oct. 1921; Advisory and Research Dept. in Agr. with Advisers in Agr. Bot., Agr. Zool., and Vet. Sc.; appeal for £250,000 endowment; petition for new charter.

**STUDENTS.** Full-time undergrad. 1038, grad. 45; part-time undergrad. 18, grad. 19.

**DEGREES OBTAINED.** Univ. of Wales: B.A. 95, B.Sc. 78, M.B., B.Ch. 2, M.A. 6, M.Sc. 4, D.Sc. 3, B.Mus. 3, B.D. 2; London: B.Sc. 6, M.B., B.S. 8, M.B. 3, B.S. 2, M.D. 2, Ph.D. (Theol.) 1; Conjoint Board: L.R.C.P., M.R.C.S. 13.

**RETIREMENTS AND RESIGNATIONS.** Profs. R. H. Pinkerton, W. N. Parker, W. T. David (on apptmt. as Prof. of Engin. in Leeds); D. J. Harries.

**EXTRA-MURAL WORK.** Univ. Tutorial Classes, 12, with 280 students; Pioneer, 23, with 529 students. Occasional lectures and one series by members of Staff. The Lectr. in Archaeol. delivered lectures throughout S. Wales. Several courses preparatory to Tutorial Classes, e.g. 6 by the Lectr. in Semitic Langs. on Comp. Religion, and 10 classes by Asst. Lectr. in Econ. and Pol. Sc. Lectures in various parts by Profs. of Tuberc. and Prev. Med.



# UNIVERSITY COLLEGE OF SWANSEA

PRESIDENT—F. W. GILBERTSON.

PRINCIPAL—T. FRANKLIN SIBLY, D.Sc. Lond. and Bris., F.G.S.

REGISTRAR—EDWIN DREW. LIBRARIAN—OLIVE M. BUSBY, M.A. Lond.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Biology*

Mockeridge, Florence A., D.Sc.  
Lond., F.L.S. Lectr.  
Adam, Miss D. I., B.Sc. Durh.  
Asst. Lectr. & Demr.  
Rees, Miss E. M., B.Sc. Lond.  
Asst. Lectr.

### *Chemistry*

Coates, J. E., O.B.E., D.Sc. Birm.,  
M.Sc., F.I.C. Prof.  
Hinkel, L. E., M.Sc. Lond., F.I.C.  
Lectr. (Organic C.).  
Ayling, E. E., B.Sc. Lond.  
Asst. Lectr.  
Butler, J. A. V., M.Sc. Birm.  
Asst. Lectr.

### *Classics*

Evans, Prof. D. Emrys, B.Litt.  
Ox., M.A. Prof.  
Handford, S. A., B.A. Ox.  
Asst. Lectr.

### *Education*

Cavenagh, F. A., M.A. Lond. Prof.

### *Engineering*

Bacon, F., M.A. Camb., A.M.I.C.E.,  
M.I.M.E., M.I.E.E. Prof.  
Isaacs, R. G., M.Sc. Bris., B.Sc.  
Lond., A.M.I.E.E.  
Lectr. (Elec. E.).  
Burness, H. H., B.Sc. St. And.,  
A.M.I.C.E. Lectr. (Civ. E.).  
Caswell, J. S. Demr.

### *English*

Thomas, W. D., M.A. Ox., B.A.  
Prof.

Jones, G. Nesta, M.A.

Asst. Lectr. (E. and Hist.).

### *Geology*

Trueman, A. E., D.Sc. Lond.,  
F.G.S. Lectr.  
Stuart, A., M.Sc. Durh.  
Asst. Lectr.

*History*, v. also Engl. [Lectr.  
Hughes, E. E., M.A. Ox., B.A.]

### *Mathematics*

Richardson, A. R., B.Sc. Lond.,  
A.R.C.S. Prof.  
Marshall, J., M.A., D.Sc. St. And.,  
B.A. Camb. Lectr.  
Wilson, R., M.A. Ox. Asst. Lectr.  
Keeping, E. S., B.Sc. Lond.,  
D.I.C., A.R.C.S. (M. and  
Physics) Asst. Lectr.

### *Metallurgy*

[Prof.  
Edwards, C. A., D.Sc. Manc.  
Coe, H. I., M.Sc. Birm. & Wales  
Lectr.  
Norbury, A. L., M.Sc. Manc.  
Asst. Lectr.]

Pfeil, L. B., A.R.S.M. Asst. Lectr.

### *Modern Languages*

Williams, Mary, D. de l'U. Paris,  
M.A. Prof.  
Husband, J. H., M.A. Sheff.  
Asst. Lectr.

*Physics*, v. also Maths.

Evans, E. J., D.Sc. Lond., B.Sc.,  
A.R.C.S. Prof.  
Jones, W. Morris, M.A. Camb.,  
M.Sc. Lectr.

Wright, L., B.Sc. Sheff.

Asst. Lectr.

### Adult Education

#### *Welsh*

Lewis, Henry, M.A.

Prof.

The Joint (College and W.E.A.)

Lewis, Saunders, M.A. Liv.

Asst. Lectr.

Tutorial Classes Committee employ one full-time as well as part-time Tutors.

## GENERAL INFORMATION (v. also p. 190)

Incorporated by Royal Charter, dated Jan. 21, 1920, the College was made a constituent College of the Univ. of Wales under the terms of a Supplemental Charter granted to the Univ. on Aug. 13, 1920.

The Municipality of Swansea has given a magnificent site of 45 acres in Singleton Park, and has granted the use of the mansion in the Park (pending the realization of a College building scheme) for the housing of the Library, Assembly Hall, Common Rooms, and Refectory, in addition to the Arts and certain Science depts. and the administrative offices. Extensive laboratories have been erected in the Park on a site adjacent to the College building. The Dept. of Engineering is temporarily housed in the buildings of the Swansea Technical College. The foundation-stone of the College buildings was laid by H.M. the King on July 19, 1920.

Situated in the heart of a district possessing a long and interesting metallurgical history and presenting an unrivalled variety of present-day metallurgical practice, the College offers exceptional advantages for preparation for professional careers in the metallurgical industry. The manufacturers of the district, who contribute largely to the support of the College, give the staff and students ample opportunities of keeping in close practical touch with manufacturing processes in the works. To ensure the closest possible co-operation with the local industries, Advisory Committees in Metallurgy and Engineering have been set up.

**FACULTIES.** Science and Arts. Departments: Metallurgy and Engineering, and Training of Teachers (men and women) for Elem. and Sec. Schools.

**COURSES FOR DEGREES, ETC.** Courses (3 years) of study are provided in preparation for the degrees of the Univ. in Pure and Applied Science and Arts; also in preparation for the College diplomas in Metallurgy and in Engineering; also Complete Prelim. Science Course for medical students and classes in Law for article clerks.

**FEES.** For tuition in Pure or Applied Science, £20; Arts or Secondary Training, £15; Registration, £1: 1s. p.a.; for Research, from 5 to 8 gs.

**RESIDENCE.** Hostels for men and for women students. A list of Registered Lodgings is kept by the Registrar.

**THE YEAR 1921-22. BENEFACTIONS.** Corporation of Swansea, £10,000; Welsh Engineers' and Founders' Assoon., £850; Dr. C. G. Higginson, £40; J. H. Lewis, M.P., £100; annual subsns., £5900; other gifts, £128. BUILDINGS for Metallurgy completed; for Physics and Chem. nearly completed. **NUMBER OF STUDENTS.** Full-time: Arts, 35 (19 women); Med., 5 (3 w.); Pure Sc., 46 (12 w.); Appl. Sc., 40; Post-grad., 2; Dipl., 5; others, 5. Part-time: Arts, 77 (54 w.); Pure Sc., 46 (17 w.); Appl. Sc., 32; Post-grad., 5. Grand Total, 298. **DEGREES OBTAINED.** M.A., 1; B.Sc., 19. **EXTRA-MURAL WORK.** Tutorial classes, 8, with 210 students; Pioneer, 9, with 189. Short courses and many single lectures in Swansea and district by members of Staff.

# UNIVERSITY COLLEGE OF THE SOUTH- WEST OF ENGLAND, EXETER

PRESIDENT—H.R.H. THE PRINCE OF WALES and DUKE OF CORNWALL.

DEPUTY PRESIDENT—SIR HENRY Y. B. LOPES, Bart., M.A., D.L.

PRINCIPAL—H. J. W. HETHERINGTON, M.A. Glas.

REGISTRAR AND SECRETARY—A. K. WOODBRIDGE.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Biology*

Sager, J. L., M.A. Camb. Lectr.  
Cumming, A. H., A.R.C.S.I.

Lectr.

### *Chemistry*

Lewis, W. H., M.A. Ox., F.I.C. [Prof.  
Glasstone, S., Ph.D. Lond., A.I.C.  
Lectr. in Physical C.  
King, Miss R., M.Sc. Lond. Lectr.

### *Classics*

Fletcher, F., M.A. Ox. Lectr.  
Levine, I., M.A. Glas. Asst. Lectr.

### *Education*

[Lectr.  
Wortley, H. A. S., M.A. Camb.  
Walker, Miss A. J., M.A. Birm.,  
B.A. Lond. Lectr.  
Story, Miss W. Lectr.  
Mathias, Miss S. Y., M.A. Liv.  
Lectr.  
Owen, W. J., M.A. Wales Lectr.  
Williams, W. J., B.A. Camb. Lectr.  
Davey, Mrs. K. W. Mistress.

### *English*

Morgan, A. E., M.A. Dub. Prof.  
Gollancz, Prof. Sir I. (v. p. 95)  
Hon. Leofric Lectr. in Old E.  
Peach, L. du Garde, M.A. Manc.,  
Ph.D. Sheff. Asst. Lectr.  
Buckhurst, Helen M'M., M.A. Ox.  
Asst. Lectr.  
Pugh, Miss F. M., B.A. Lond.  
Asst. Lectr.

### *Geology and Geography*

Clayden, A. W., M.A. Camb.,  
Visiting Director.  
Lewis, W. S., B.Sc. Lond., F.G.S.  
Lectr.  
Williams, D. T., B.A. Wales  
Lectr.

### *History and Economics*

Harte, W. J., M.A. Ox. Prof.  
Patterson, E. J., M.A. Camb.  
Lectr.  
Easterling, Miss R. C., M.A. Wales  
Lectr.  
Whyte, W. H., M.A. Leeds  
Lectr.

### *Keltic*

Jenner, H., M.A. Wales  
Hon. St. Petrock's Lectr.

### *Law*

Michelmore, H. T., M.C., LL.B.  
Lond. Lectr.

### *Mathematics*

Benny, L. B., M.A. Cantab., B.A.  
Lond. Lectr.  
Cook, Miss H. M., B.A. Lond. Lectr.  
Mallison, H. V., B.A. Camb. Lectr.

### *Modern Languages*

Schopp, J. W., M.A. Lond. Lectr.  
Lockyear, Miss J. I., B.A. Lond.  
Asst. Lectr.  
Mayoux, J., L. ès L. Paris  
Asst. Lectr.

Villedieu, Mdle. Y. E.	Asst.	<i>Physics</i>
		Newman, F. H., D.Sc. Lond., A.R.C.Sc. Lectr.
<i>Music</i>		
Bullock, E., Mus.D.	Durh.,	Searle, V. H. L., B.Sc. Lond.
F.R.C.O.	Lectr.	Asst. Lectr.

<i>Pharmacy</i>		<b>Tutorial Classes</b>
Ware, A. H., Ph.C.	Lectr.	Organiser: E. J. Paterson, M.A.
		Tutors: Profs. A. E. Morgan and W. J. Harte; W. H.
<i>Philosophy</i>		Whyte, I. Levine, W. S.
The Principal	Prof.	Lewis.
Levine, I., M.A. Glas.	Lectr.	

## GENERAL INFORMATION

Founded 1865. Organized as University College, 1901. Incorporated 1922.

Classes in Arts, Science, Economics, Law, Agr. and Horticulture prepare for degrees of Univ. of London. Courses are provided for Elementary and Secondary teachers, for entrance into Civil Service, and for the first year of Medical study. The Training Department is recognized as a Training College for Elem. and Secondary teachers. Attached to the College is a School of Pharmacy. The Royal Albert Memorial Library (60,000 vols.) and Museum are closely associated with the College, and the important collections of books and scientific material are freely available for advanced students of the College.

**ADMISSION.** Minimum age, 18: though relaxation may be made under special circumstances.

**TUTORIAL BOARDS** in Arts and Science have been appointed to supervise the studies of students.

**FEES.** Sessional: Intermediate course, 16 gs.; final course in Arts, 20 gs.; Science, £25.

**AFFILIATION.** The College is affiliated to the Univs. of Ox. and Camb. It is recognized by the Camb. Special Board for Med., and the Conjoint Med. Board as a place of instruction in Chem., Physics and Biol., etc.

**RESIDENTIAL FACILITIES.** For *women*—(a) Hartwell House (31), sessional fee £50-£58; (b) College Hostel (68); (c) Diocesan Church Hostel (30). For *men*—Grendon House (40). All women students not living at home must reside in hostel. Men students may live in licensed lodgings: costs range from 32s. 6d. to 40s. per week for board and lodging. All students in lodgings are subject to the discipline of the Supervisor of Lodgings.

**PUBLICATIONS.** *Calendar*, issued (free) in July; *College Magazine* (terminally); the *College Field Club Proceedings*.

## THE YEAR 1921-22

**BENEFACTIONS.** Sir Hy. Lopes, Bart., £8000 for the Endowment Fund; other contributions amounting to £2500 were received or promised; a bequest

of about £3000 for Scholarships for encouragement of post-graduate work in Science; W. H. Reed, J.P., has given the Mansion House of Streatham Hall and adjacent grounds comprising an area of 11 acres as a site for the new College buildings; adjoining land covering 107½ acres has been purchased for the College.

**NEW DEVELOPMENTS.** The University Grants Committee visited the College in Feb. and decided, subject to a reconstitution of the governing bodies, to recommend the inclusion of the College on the Treasury list. A new Court of Governors, Council, and Senate were duly constituted, and the College was placed upon the Treasury list as from Aug. 1, 1922. The annual Treasury grant has been fixed for the present at £2000, and a non-recurrent grant of £4000 has been made. The College has been incorporated under the Companies Acts. The School of Art formerly attached to the College was taken over by the Exeter Education Authority on Aug. 1, 1922. A Secondary Training Department was instituted and recognized by the Board of Education. A three-years' course for the Higher certificate of the National Froebel Union was instituted jointly with the Maynard School; likewise a joint course with the Seale-Hayne Agr. College for the London B.Sc. in Agr.

**NUMBER OF STUDENTS.** Full-time preparing for first degree, 94; Post-graduate, 2; Diploma and Certificate, 201; Part-time students, 58; School of Art, 71; School of Pharmacy, 42.

**DEGREES OBTAINED.** Ph.D., 1; M.A., 1; B.A., 13; B.Sc., 11.

**UNIVERSITY EXTENSION.** Classes in connexion with the W.E.A. at 10 centres in Devon and Cornwall.

# UNIVERSITY COLLEGE OF NOTTINGHAM

PRESIDENT—His Grace the DUKE OF PORTLAND, K.G.

VICE-PRESIDENTS—Sir JESSE BOOT, Bart. ; Alderman E. HUNTSMAN  
(Chairman of Council) ; Lt.-Col. HENRY MELLISH, C.B. ; JOHN G.  
SMALL, J.P.

PRINCIPAL—W. H. HEATON, M.A.

REGISTRAR—J. E. SHIMELD.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

### *Biology*

Carr, J. W., M.A. Camb. Prof.

Lectrs. and Demrs. :

Holden, H. S., D.Sc. Manc.

Bexon, Dorothy, M.Sc. Lond.

(Bot.).

Hutchinson, Harriet J. (Histology  
and Physiology).

### *Chemistry and Metallurgy*

Kipping, F. S., Ph.D. Mun., D.Sc.

Lond., F.I.C., F.R.S. Prof.

Lectrs. and Demrs. :

Prideaux, E. B. R., M.A. N.Z.,  
D.Sc. Lond.

Lambourne, H., B.A. Camb.,  
B.Sc. Lond., F.I.C.

Firth, J. B., D.Sc. Manc., F.I.C.

Laxton, F. C., B.Sc. Lond., A.I.C.

Trotman, S. R., M.A. Camb.,  
F.I.C.

Watson, F. S., M.Sc. Manc.

Driver, J. E., B.Sc. Lond.

Bentley, A. O.

### *Classics and Philosophy*

Granger, F. S., D.Lit., M.A. Lond.  
Prof.

Barker, E. P., M.A., D.Litt.

Lectr. in C.

Mace, C. A., M.A. Camb. „

Adam, E. P., B.A. Lond. „

### *Economics and Commerce*

Kirkaldy, A. W., M.A., B.Litt.

Ox., M.Com. Birm. Prof.

Radford, A., B.Sc. Econ. Lond.

Lectr. in E.

Howard, S. C. Lectr. in C.

Mosley, J. W. P., Barr. at Law.

Lectr. in Comml. Law.

Blythen, S., F.C.A., Prof. of Acctcy.

Lectrs. in Acctcy. :

Cairns, R. G., A.C.A.

Cullen, W. E., A.C.A.

5 Lectrs. in Insurance and Practi-  
cal Banking

### *Education*

..... Prof.  
Moncrieff, Miss A., M.A. Edin.

Normal Mistress.

Adam, Anne K. Normal Mistress.

Becket, Miss E. M., M.A. Lond.

Lectr.

Newton, W. H., B.Sc. Lond.

Normal Master.

Drew, A., B.A. Ox. „

Ward, Miss L. M. Lectr.

Lectrs. in Hygiene and in Needle-  
work.

2 Lectrs. in Phys. Exercises.

### *Engineering and Technology, v.*

also Textiles [Prof. of E.

Bulleid, C. H., O.B.E., M.A.

Camb., A.M.I.C.E., M.I.M.E.

Robinson, W., M.E. Belf., M.I.C.E.,  
M.I.M.E. Prof. of T.

Lectrs. and Demrs. :

Richardson, W. A., M.Sc., B.Sc.  
(Eng.) Lond. (Civil E.).

Cotton, H., M.B.E., B.Sc. Lond.  
(El. E.).

Dickson, J. M., B.Sc.Lond. (M. E.).  
Bedford, J., A.M.I.Mech.E.,  
A.M.I.A.E.

Wilde, J. H., B.Sc. (Eng.) Lond.

Bird, A. W., B.Sc. Lond. (Geom.  
and Applied Mechanics).

Hollingworth, W. (Pattern Mak-  
ing).

Parr, A. (Metal Work).

20 other Technical Teachers.

*English*

Bond, R. W., M.A. Ox. Prof.

De Castro, Miss Lectr.

Hewitt, R. M., M.A. Ox. Lectr.

Selby, Alice Lectr.

*Geology and Geography* [Prof.

Swinnerton, H. H., D.Sc. Lond.

Beasley, C. G., B.A. Lond.

Lectr. in Geog.

Richardson, W. A., M.Sc. Lond.

Lectr. in Geol.

Straw, S. H., B.Sc. Lond.

Lectr. in Geol.

*Hebrew* [Lectr.

Sanders, H. F., B.A., B.D. Lond.

*History*

Owen, L. V. D., M.A. Ox. Prof.

Guilford, E. L., M.A. Camb. Lectr.

Brameld, Nina, M.A. Lond. Lectr.

*Hygiene and San. Sc.*

Cotterill, W. H., M.R.San.I.

Sutton, J. A., Cert.R.San.I.

*Law*

Huntsman, E. Director & Lectr.

*Mathematics*

Piaggio, H. T. H., M.A. Camb.,  
D.Sc. Lond. Prof.

Green, H. G., M.A. Camb. Lectr.

Wells, F. A., B.A. Camb. Lectr.

6 other Lectrs.

*Metallurgy*, v. Chem.

*Military Science* [Dir.

Pickbourne, Capt. H., B.A. Lond.

2 Lectrs. and Instrs.

*Mining*

McMillan, W. H., B.Sc. Glas.,  
M.I.Min.E. Prof.

Watkins, W. G., M.I.M.E.,  
M.I.Mech.E. Lectr.

Whitaker, J. W., B.Sc. Lond.,  
A.I.C. Lectr.

Jones, W. A., M.I.Min.E. Lectr.

Watson, J. M. R., B.Sc. Glas.,  
A.M.I.Min.E. Lectr.

*Modern Languages*

Weekley, E., M.A. Camb. Prof.

Lectrs. :

Peck, Mrs. L. (English Phonetics).

Bourdache, E., B. ès L. (French).

Guigou, Mlle. M., L. ès L. (French).

Schweizer, W. R., Ph.D. (German).

Moroni, Mme. (Italian).

Hewitt, R. M., M.A. Ox. (Portu-  
guese).

Lavrin, Prof. J. (Russian and  
Slavonic).

Chamberlain, G. L., M.A. Edin.  
(Spanish).

*Music*

Lectrs. :

Henniker, L., Mus.B.

Barber, E. M., L.R.A.M.

1 other Lectr.

*Philosophy*, v. Classics

*Physics* [Prof.

Barton, E. H., D.Sc. Lond., F.R.S.

Lectrs. and Demrs. :

Shaw, P.E., B.A.Camb., D.Sc.Lond.

(Dir. Sub-Dept., Metrology).

Franks, A. H., B.Sc. Lond.

Browning, Helen, M.Sc., Ph.D.  
Lond.

Davy, N., B.Sc. Lond.

Brookes, A., M.Eng. Manc.

3 other Lectrs. and Demrs. in  
Telegraphy, etc.

*Physiology*, v. Biol.

<i>Technology</i> , v. Engin., Textiles	Richardson, L. G. (Dyeing and Bleaching).
<i>Textiles</i>	5 Demrs.
Davis, W., M.A. Edin. Prof.	<i>Zoology</i> , v. Biol.
Lectrs. :	Adult Education
Barr, J. (Yarn Testing).	
Trotman, S. R., M.A. Camb., F.I.C. (Dyeing and Bleaching).	Peers, R., M.A. Liv. Prof. Wright, B. A., B.A. 3 other Lectrs and an Organizer.

## GENERAL INFORMATION

The College, opened in 1881, is in the centre of the city. The Free Public Library is at present housed in the College building. New buildings are being erected on a site 3 miles distant.

**COURSES:** For London degrees in Arts, Econ., Com., Div., Pure Science, Med., Agric., Engin., and Mining; Associateship of the College in Comm., Geog., Adult Education, Engin., Mining, Mine Surveying, Hosiery (each 3 yrs.); Social Study Diploma (1 yr.); Bd. of Educn. Elem. Teachers' Certif. and Cambridge Secondary Teachers' Diploma; L.D.S.; Assoc'ships of the Insts. of Chem. and Physics; Colliery Manager's Certif.; Civil Service Appointments; D.P.H.; Pharmacy Diplomas; Post-grad. and Research courses in Arts and Pure Science. Special English course for Foreigners.

*Evening Classes*, including some held on Thursday aftn. and Sat. morning and aftn., for London B.Sc., B.Sc. Econ., B.Sc. Engin. and Interm. Arts; St. And, L.L.A.; Comml.; Dispensing and Pharmacy; Engin. and Technology; Mining; Textiles, including Yarn Testing, Hosiery, Dyeing.

The session for Day Classes is Sept.-July; Evening, Sept.-April.

**FEES.** Tuition composition, per annum: Interm. or Degree courses in Arts, Div., or Econ.—20 gs.; in other Faculties, or Diploma courses in Commerce, Geog., Engin., Mining, Mine Surveying, Pharmacy, or for A.I.C.—30 gs.; Social Study Diploma (complete course)—£10; L.D.S.—18 gs.; Colliery Manager's Certif.—6 gs.; D.P.H. (complete course)—30 gs.; English course for Foreigners—£12; Registration fee, £1 p.a.; Union fee, £1: 1s. p.a.

Evening Classes, 15s. per session.

**RESEARCH SCHOLARSHIPS** in Arts and Science of from £50 to £75 are awarded annually in Dec. Special facilities for research in all subjects.

**RESIDENCE.** Mapperley Hall (men) and Cavendish House (women) primarily for Elem. Training students. Waverley House (men) and Hollygirt (women)—inclusive fee, 30s. and 25s. per week. Registered lodgings, 30s. to 40s. Students are, when possible, placed with private families.

**PUBLICATIONS.** *Calendar* (Oct.), 1s.; *Day and Evening Prospectuses*, 2d.; *The Gong*, 3 times a year.

## THE YEAR 1921-22

**BENEFACTIONS.** Sir Jesse Boot, an additional £10,000, making £150,000 in all, towards the erection of the new Univ. Buildings; an anonymous donor, £100,000; Nott. Dyers and Bleachers' Assocn. and Nott. Lace and Net Dressers' Assocn., £450 *per annum* towards the cost of the Dept. of Dyeing and



Bleaching; training grant, £2750. Members of local firms presented apparatus and machinery worth £6000 to the Dept. of Textiles.

NEW BUILDINGS AND EQUIPMENT. Foundation stone of new Univ. buildings was laid by Lord Haldane on June 14, 1922. Five additional workshops were taken for the extension of the Hosiery Department and for laboratories in connexion with Dyeing and Bleaching.

CO-OPERATION. A full-time tutor has been appointed in the Dept. of Extra-Mural Educn. by special arrangement with Loughborough Coll. and the Leicestershire L.E.A. A Joint Diploma in Social Study has been established in connexion with this Coll. and the Paton Congregational Coll., and students of the latter attend special courses of lectures at Univ. Coll.

OTHER DEVELOPMENTS. Special Intra-Mural courses for adult students were arranged in connexion with the Dept. of Adult Educn. A Summer School for Teachers was held in Aug., 1921. A One-year Post-graduate course has been arranged for graduates who desire to fit themselves as part-time or full-time teachers of Univ. Tutorial Classes.

RETIREMENTS. J. C. Jinks, to take up a commercial post; Miss M. J. Connaughton; J. Westmoreland, on superannuation.

DEATHS. Dr. F. Radcliffe and Prof. A. B. Henderson.

PUBLIC LECTURES. 26 were delivered.

NUMBER OF STUDENTS. Full-time preparing for bachelorship, 244, including 57 women; for diploma, 365 (81 women); research workers, 18 (1 woman). Total day students, 852. Extra-mural classes, attendance—645.

DEGREES OBTAINED. M.A., 1; M.Sc., 2; B.A., 6; B.Sc., 32; B.Sc. Eng., 11. Total, 52.

# UNIVERSITY COLLEGE, READING

VISITOR—THE DEAN OF CHRIST CHURCH, OXFORD.

PRESIDENT OF THE COURT OF GOVERNORS—J. H. BENYON, M.A., Lord-Lieutenant of Berkshire.

VICE-PRESIDENTS—SIR HALFORD J. MACKINDER, M.A. ; Mrs. G. W. PALMER ; A. PALMER (CHAIRMAN OF COUNCIL).

PRINCIPAL—W. M. CHILDS, M.A.

TREASURER—SIR WILLIAM A. MOUNT, Bart., C.B.E., M.A.

SECRETARY AND REGISTRAR—F. H. WRIGHT, M.A.

TUTORIAL SECRETARY—H. KNAPMAN, M.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Agriculture, etc., v. infra</i>	<i>Commerce</i>	
<i>Art</i> (Department of Fine Arts)	Taylor, H., F.L.A.A.	Lectr.
Seaby, A. W.	2 Assts.	
5 Teachers and an Asst. in Drawing and Painting, Design, Modelling, Handicrafts.	<i>Dairying, v. infra</i>	
<i>Botany, v. also Agr.</i>	<i>Domestic Subjects</i>	
Stiles, W., M.A., Sc.D. Camb. Prof.	Wood, Mrs. E. May	Lectr. in charge of Dept.
Burt, A. H., D.Sc. Tüb., B.Sc. Manc.	3 Assts. and a Teacher of Dress-making and Needlework.	
Pranker, Theodora L., B.Sc. Lond., F.L.S.	<i>Economics</i>	
	Buer, Mabel C., B.Sc. Lond. Lectr.	
<i>Chemistry, v. also Agr.</i> [Prof.	<i>Education</i>	
Bassett, H., D.Sc. Lond., Ph.D. Mun., D. ès Sc. Nancy, F.I.C.	Cooke, H. S., M.A. Ox. and Cape Sen. Lectr.	
Dodgson, J. W., B.Sc. Lond. A.I.C.	Ashcroft, Lucy, M.A. Dub. Lectr.	
Maxted, D. R., B.Sc. Lond., A.R.C.Sc.	Bolam, Mary, M.A. Dub. Lectr.	
A Sessional Lectr.	Etty, J. L., M.A. Ox. Lectr.	
<i>Classics</i>	Mellor, Ethel, D. ès Sc. Paris, A.R.C.Sc. Lectr.	
Ure, P. N., M.A. Camb. Prof.	Wolters, A. W. P., M.A. Lond. Lectr.	
Dodds, E. R., B.A. Ox. Lectr.	Glason, J. A., M.B.E. Asst. Lectr.	
Haigh, W., M.A., B.Sc. Lond.	Walker, Alice H., A.R.C.O.	
Lectr. (in German also).	Asst. Lectr.	
Leigh, Margaret, M.A. Ox. Lectr.	A Lectr., Asst., and Sessional Instr. in Physical Training.	

*English Language & Lit.* [Prof.  
Dewar, R., M.A. Glas. (E. Lit.)  
Morley, Edith J. (E. Lang.) Prof.  
Powell, Annie E., M.A. Ox.

Lectr.  
Lee, Margaret L., M.A. Ox. Lectr.  
A Sessional Asst. in Phonetics.

*French* [Prof.  
Desseignet, J., Ag. de l'U. Paris.  
Paton, Dora A., B.A. Ox. Lectr.  
Salmon, Yvonne M., B. ès L. Lectr.

*Geography*  
Spicer, E. C., M.A. Ox. Lectr.  
A Sessional Lectr. and Asst.

*Geology*  
Hawkins, H. L., D.Sc. Manc.,  
F.G.S. Prof.  
Dwerryhouse, A. R., D.Sc. Leeds,  
M.Sc. Manc., F.G.S. Lectr.

*German*, v. Classics

*History, Modern*  
Stenton, F. M., M.A. Ox. Prof.  
The Principal Hon. Prof.  
Sacret, J. H., M.A. Ox. Lectr.  
Stenton, Mrs. D. M., B.A. Lond.  
Lectr.  
Peyton, S. A. Asst. Lectr.

*Mathematics*  
Neville, E. H., M.A. Camb. Prof.  
Ashcroft, Lucy, M.A. Dub. Lectr.  
Clatworthy, J. P., B.Sc. Lond.  
Lectr.  
Knapman, H., M.A. Camb. Lectr.  
Ternouth, Elsie J., M.A. Glasg.  
Lectr.  
Bowler, F. T., B.Sc. (Eng.) Lond.,  
A.M.I.C.E. (Applied Mech.)  
Asst. Lectr.  
A Teacher of Machine Drawing.

*Music*  
Allen, Sir Hugh P., M.A. Camb.,  
D.Mus. Ox. Visitor of Dept.  
16 Teachers.

*Philosophy*  
De Burgh, W. G., M.A. Ox. Prof.  
Ward, S. B., B.A. Ox. Lectr.

*Physics*  
Duffield, W. G., B.A. Camb., D.Sc.  
Manc. and Adel. Prof.  
Bond, W. N., M.Sc., B.Sc. (Eng.)  
Lond., A.R.C.Sc. Lectr.  
Pearson, R. L., A.M.I.E.E. Lectr.  
Littlewood, T. H., M.A. Ox.,  
B.Sc. Lond.  
Hon. Research Fellow.

*Psychology*  
Wolters, A. W. P., M.A. Lond.  
(also Lectr. in Educn.) Lectr.

*Spanish*  
A Sessional Teacher.

*Vet. Hygiene*, v. Agric.

*Zoology*  
Cole, F. J., D. Sc. Ox. Prof.  
Eales, Nellie B., B.Sc., Ph.D. Lond.  
Lectr.  
A Museum Asst.

## Agriculture and Horticulture

*Agriculture*  
Pennington, S., B.Sc. Edin.,  
M.R.C.V.S. [Prof.  
Robinson, H. G., M.Sc. Durh. Lectr.  
An Instr. in Poultry.  
County Organizer and 4 Instrs. for  
Berkshire.

*Agr. Botany* [Prof.  
Percival, J., Sc.D. Camb., F.L.S.  
Erith, Adela G., B.Sc. Lond. Lectr.  
Grieve, Lorna, B.Sc. Lond. Demr.

*Agr. Chemistry*, v. also Dairy C.  
Neville, H. A. D., M.A. Camb.,  
B.Sc. Lond., F.I.C. Prof.  
Murray, J. A., B.Sc. Edin. Lectr.  
Nicholson, H. H., M.A. Camb.  
Lectr.  
Thompson, J., Ph.D. Heid., F.I.C.  
Analyst.  
Harris, E. T., B.A. Camb., A.I.C.  
Demr. etc.

*Bacteriology*, v. also Dairy B.  
Mason, Grace H., N.D.D. Lectr.

*Building Construct., etc.* [Lectr.  
Hitchins, W. W., M.S.A., P.A.S.I.  
An Asst.

*Dairy Farming*  
Mackintosh, J., O.B.E., N.D.A.,  
N.D.D. Lectr.  
An Asst.

*Dairy Bacteriology*  
Williams, R. S., M.B., C.M., B.Sc.  
Edin., D.P.H. Camb.  
Research Prof.  
2 Assts.

*Dairy Chemistry*  
Golding, J., F.I.C.  
Research Chemist.

Mattick, Mrs. E., M.Sc. Bris.  
Asst. for Research.

*Economic Mycologist*  
Buddin, W., M.A. Camb.

*Horticulture*  
Cobb, A. J. Lectr. and Instr.  
2 Assts.

*Machinery*  
An Instr.

*Plant Pathologist*  
Mosley, F. O., F.L.S.

*Veterinary Hygiene*  
Male, G. P., M.R.C.V.S. Lectr.

BRITISH DAIRY INSTITUTE (occupying a building on the College site and controlled by a committee representing the British Dairy Farmers' Assocn. and the College). Manager and Chief Instructor—A. Todd. 2 Asst. Instrs.

## GENERAL INFORMATION

"The University Extension College, in conjunction with the Schools of Science and Art, Reading," was opened in 1892 and incorporated under the Companies Acts in 1896, and became the University College, Reading, in 1902. It has an endowment of £250,000.

LIBRARY, 27,500 vols. MUSEUMS: Zool. and Hist. and Archæol. LABORATORIES: Bot., Chem., Geol., Physics, Psych., Zool. Fine Art Studios. School of Music. Gymnasium. Two farms (359 and 141 acres) and Hortic. Station.

FACULTIES: Letters, Science, Agric. and Horticulture (associated with which are the National Inst. for Research in Dairying and British Dairy Inst.).

DEPARTMENTS: Fine Arts, Music, Domestic subjects.

ADMISSION. Candidates for Degree courses must matriculate before admission. Entrance examn. for Diploma courses in Agric., Dairying, Hortic., Domestic subjects.

DEGREE COURSES are provided for the London B.A., M.A., Ph.D., B.Sc. (Pass and Hons.), B.Sc. in Agric. (3 yrs.) and Hortic. (4 yrs.), and the 2nd examn. for Med. degrees, Pt. I., of London.

COLLEGE DIPLOMA (Associateship) COURSES: 2 yrs.—Agric., Commerce, Dairying, Domestic subjects, Educl. Handicrafts, Hortic., Letters; 3 yrs.—Fine Art, Music, Distinction in Agric., Dairying, Domestic subjects, or Hortic.

OTHER COURSES for College Certifs. in Agric. (6 mos.), Commerce, Domestic subjects, Geog., Hortic., Phys. Training, Secretarial subjects (1 yr.), Metal Work, Wood Carving, Embroidery, Leather Work, Weaving, Writing and Illumination (2 yrs.); for the 1st examn. of the R.C.P. and R.C.S., the Camb. Teachers' Certif. (1 yr.), British Dairy Farmers' Assocn. examns. (6 mos.),

L.R.A.M., A.R.C.M., etc.; Special courses in Illustration and for women teachers of Phys. Training in Continuation and Central Schools.

**FEES.** For Tuition: Degree or Diploma course—Arts, £25 p.a., Sc., £30 p.a. (Dairying, £35 for 1st., £41 for 2nd year; Fine Arts, £18); Certif. course—£18 to £30.

**SCHOLARSHIPS, ETC., FOR GRADUATES.** Two Research Fellowships of £125 each, and several Scholarships in connexion with the **HALLS OF RESIDENCE**, which provide accommodation for 400 students, men (£80 per session of 30 weeks) and women (£54 to £64). Sanatorium attached.

**UNIVERSITY EXTENSION, ETC.** Agriculturists are helped by correspondence, visits, local lectures, examination of diseased plants, etc. Evening classes are held in Machine and Building Constn., Builders' Quantities, and most of the subjects in which Day courses are provided. Tutorial classes are held in connexion with the W.E.A.

**PUBLICATIONS.** *Calendar* (Sept.), 6d.; *Tamesis* (students'), terminally.

**THE YEAR 1921-22.** *New Developments.* Messrs. Huntley and Palmers, Ltd., promised £10,000 for agric. research conditional on the grant of a Univ. Charter. A Reading Citizens' Endowment Fund was established, and over £5000 was subscribed for it. Other donations to endowment funds amounted to £2500. The adaptation of the Manor House and erection of new farm buildings at Shinfield for the National Inst. for Research in Dairying were begun. The Board of Education approved an arrangement whereby students of the College receiving grants under the Board's regulations for the training of teachers will be permitted under certain conditions to take the London Univ. External B.Sc. course in Agric. as an alternative to a course in Arts or Pure Science.

*Number of Students.* Full-time, preparing for first degree, 227, including 139 women; for first diploma, 274 (188 women); post-grad. and research, 6. Other day students, 403; evening, 565.

*Degrees obtained* (Univ. of London). Arts and Science, 34; Engineering, 2; Agric., 9; Hortic., 1.

# THE UNIVERSITY COLLEGE OF SOUTHAMPTON

PRESIDENT—CLAUDE G. MONTEFIORE, M.A.

VICE-PRESIDENTS—SIR BEETHOM WHITEHEAD, K.C.M.G., M.A. ;  
ALEX HILL, M.A., M.D.

TREASURER—H. W. R. BENCRAFT, M.R.C.S., L.R.C.P., J.P.

PRINCIPAL—KENNETH H. VICKERS, M.A.

REGISTRAR—D. KIDDLE.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Art</i>	Instructress.	<i>Economics</i> , v. also Comm.	
Conway, Miss E. I., A.R.C.A.		.....	Lectr.
<i>Botany</i>		<i>Engineering, Civ. and Mech.</i>	
Mangham, S., M.A. Camb. Prof.		Eustice, J., B.Sc. Lond., A.R.S.M.,	
Loader, Miss F. M., B.Sc. Lond.		A.M.I.C.E.	Prof.
	Lectr.	Mann, E. E., M.Sc. Leeds,	
<i>Chemistry</i>		A.M.I.C.E.	Lectr.
Boyd, D. R., D.Sc. Glas., Ph.D.		Glover-James, H., Dip. Eng. Edin.	
Heid., F.I.C.	Prof.	Ford, G. P.	Asst.
Smith, A. E. Clarence, B.A. Camb.,		Moyle, R. C.	Demr.
A.I.C.	Lectr. in Physical C.		
Paton, F. J., B.Sc. Birm.	Lectr.	<i>Engin., Elec.</i> , v. Physics	
Smith, F. J., B.Sc. Lond.	Demr.		
<i>Classics</i>		<i>English</i>	
Forsy, G. F., M.A. Lond.	Reader.	Margoliouth, H. M., M.A. Ox.	Prof.
		Aubrey, Miss E. R., M.A. Lond.	
<i>Commerce</i>	[Reader.		Lectr.
Scholfield, A., M.Com. Manc.		Crawford, S. J., M.A. R.U.I.,	
Plummer, A., B.Sc. Lond.	Lectr.	B.A. Ox.	Lectr.
<i>Education and Philosophy</i>		<i>Geography</i>	
Cock, A. A., B.A. Lond.	Prof.	Rishbeth, O. H. T., M.A. Ox.	
Dudley, G., B.A., LL.B. R.U.I.			Reader.
	Lectr.	Miller, Miss F. C., B.A. Leeds	
Green, Mrs. A., M.A. Manc.	Lectr.		Lectr.
Kelly, V. G. F., B.Sc. Lond.		<i>Geology and Zoology</i>	
	Lectr.	Sherriffs, W. R., M.A., D.Sc.	
		Aberd.	Reader.

<i>History</i>		<i>Physics &amp; Electrical Engineering</i>	
Lyttel, E. S., M.A. Ox.	Prof.	Stansfield, H., D.Sc. Lond.,	
Horrocks, J. W., D.Lit. Lond.		A.M.I.E.E.	Prof.
	Lectr.	Spary, P. G., B.Sc. Lond., M. Eng.	
Mudie, Miss P., M.A. Manc.		Sheff., A.M.I.E.E., A.M.I.C.E.	
	Lectr.	Lectr. in Electro-technics.	
<i>Hygiene for Men</i>		Tomlinson, H. J., B.Sc. Lond.,	
McKaig, Andrew, M.B., Ch.B.		A.I.E.E.	Lectr.
Edin.	Lectr.	Chester, C. E., B.Eng. Sheff.	
<i>Hygiene for Women</i>			Asst. Lectr.
McKaig, Mrs. Andrew, M.B., Ch.B.		Cox, H. B., O.B.E.	Demr.
Edin.	Lectr.		
<i>Mathematics, Pure and Applied</i>		<i>Romance Languages and German</i>	
Watkin, E. L., M.A. Camb.	Prof.	Patchett, E. W., B.A. Camb.	Prof.
Stuart, T., D.Sc., R.U.I., M.A.		Hamilton, Miss G.	Lectr.
Camb.	Lectr.	Chauvigné, M., L. ès L.	
Trout, Miss A. M., B.A. Lond.			Asst. Lectr.
	Lectr.	<i>Spanish</i>	
Lowry, H. V., B.A. Camb.	Lectr.	Lindsay, E., Lic. es Artes, Valla-	
<i>Music</i>		dolid	Lectr.
Leake, G., Mus.Bac. Durh.,			
F.R.C.O.	Prof.	<i>Zoology, v. Geol.</i>	

## GENERAL INFORMATION

Founded 1850 ; opened as the Hartley Institution, 1862. Incorporated as the Hartley University College in accordance with a scheme of the Board of Education, 1902.

Classes in Arts and Science prepare for the degrees of the Univ. of London ; a Commercial course for the B.Sc. (Econ.) and B. and M.Com. The Coll. has a Dept. of Engineering—Civ., Mech., and Elec. It provides courses for Elem. and Secondary Teachers, for entrance into the Civil Service, the first year of Med. Study, Pharmacy, Surveying, etc. It is recognized as a Training Coll. for Elem. Teachers. It is affiliated to the Univ. of Camb. Through its Evening Classes (attended by upwards of 600 students) it performs the function of a Technical Institute.

**ADMISSION.** The minimum age for both Day and Evening students is 16. Each full-time student is placed under the supervision of a member of the Staff, who acts as his Tutor.

**FEES.** The sessional fee is £25 for Courses in Arts, £30 for Courses in Science or in Engineering.

**RESIDENTIAL FACILITIES.** South Stoneham House, Hostel for men ; Warden—Prof. A. A. Cock, B.A. South Hill, Bassett, Hostel for Women ; Warden—Mrs. Ashdown. Highfield Hall, a Hall of Residence for Women ; Warden—Miss E. R. Aubrey, M.A.

**PUBLICATIONS.** *Handbook*, pubd. in Sept. ; *Hartley Mag.*, terminal, 6d.

## THE YEAR 1921-22

NUMBER OF STUDENTS, 1919-22: Full-time, preparing for the B.A. or B.Sc. degree—men, 99, 98, 74; women, 45, 67, 54; for Diplomas, Certificates, etc.—men, 113, 96, 119; women, 65, 71, 114.

DEGREES OBTAINED, 1919-22. M.A., 0, 2, 0; B.A., 2, 9, 16; B.Sc., 3, 10, 17.



# THE SCOTTISH UNIVERSITIES

ST. ANDREWS  
GLASGOW

ABERDEEN  
EDINBURGH

## REPRESENTATIVES IN PARLIAMENT

Sir GEORGE A. BERRY, M.B., LL.D. ; DUGALD M'COIG COWAN, M.A. ; Rt. Hon. Sir HENRY CRAIK, K.C.B., M.A., LL.D.

IN CONSTITUTION these 4 Universities have under the operation of the Univs. (Scotland) Acts, 1858 and 1889, been to a great extent assimilated. By the former Act 2 new bodies, called the Univ. Court and General Council, were instituted ; by the latter a Committee of H.M.'s Privy Council was constituted, and an Executive Commission was created with extensive powers, which it continued to exercise till the end of 1897. These Commissioners issued ordinances, *inter alia*, for degrees, for the instruction and graduation of women, for special study and research, and for the constitution of a Students' Representative Council with power to petition the Senatus Academicus and the Univ. Court.

The *Chancellor* is elected (for life) by the General Council, of which he is President. He is empowered to nominate a *Vice-Chancellor*, who may confer degrees in his absence, but cannot discharge any other of his duties. The Vice-Chancellorship is at the present time held in each Univ. on the Chancellor's nomination by the *Principal*, who is appointed by the Crown (except in Edinburgh) and is President of the Senatus Academicus, and, in the absence of the Rector, of the Univ. Court. The *Rector* is elected every 3 years by the matriculated students. He is the official President of the Univ. Court.

The *University Court* consists of the Rector, Principal, the Lord Provost of the City (in St. And. the Provost of St. Andrews and Lord Provost of Dundee), and Assessors appointed by the Rector, Chancellor, Senatus, General Council, and (except in St. Andrews) Town Council. In St. Andrews the Principals of St. Mary's Coll. and Univ. Coll., Dundee, are also included in it. There is provision for the representation of other affiliated Colleges. The Court, a body corporate with full power to administer the property belonging to the Univ., is a Court of Appeal from the Senatus and has power, since the expiration of the powers of the Commrs. under the Act of 1889, to found new chairs with the approval of the Univs. Committee and make other ordinances with the approval of H.M. in Council. It has, *inter alia*, powers to appoint professors whose chairs are in the patronage of the Univ., examiners and lecturers ; to define the nature and limits of a professor's duties under his commission ; and to recognize for graduation purposes the teaching of any College or individual teacher, under the regns. providing for such recognition.

The *Senatus Academicus*, consisting of the Principal and the whole of the Profs., is entrusted with the regulation and superintendence of the teaching and discipline of the Univ. The administration of the Libraries and Museums is entrusted to Joint Committees elected two-thirds by the *Senatus* and one-third by the Court.

The *General Council* consists of the Chancellor, the members of the Univ. Court, the Profs. and the Graduates of the Univ. It meets twice a year and may hold special meetings at the instance of the Chancellor. Proposed improvements in the arrangements of the Univ. must be submitted to the Council for their consideration.

The General Councils of the four Universities elect three *Members of Parliament*.

**FACULTIES.** In all the Univs.—Arts, Science, Divinity, Medicine. In all except St. Andrews—Law. In Edin. only—Music.

**SESSIONS.** Oct. to March and April to May or June. The winter session is divided into 2 terms. In Divinity there is no regular summer session at Glas. or Aberd.

**ADMISSION** (v. also p. 6). The Preliminary Examn. Regulations prescribe for a candidate for a first degree in Arts or Science or Medicine that before entering on the curriculum he pass on specified standards an examn. in (1) English; (2) Latin or Greek; (3) Maths.; (4) another (approved) language or Dynamics; provided that Science and Medical Students may substitute French or German for Latin or Greek, and candidates for the B.Sc. in Engineering need not pass before entering on the curriculum, but only before taking any part of the First Science examn.

*Exemption (pro tanto)* is granted in consideration of having passed approved equivalent examns. Candidates from abroad, whose native language is other than English, must pass a Special examn. in English (held in March and Sept.; in set works and an oral examn.). Candidates from the British Empire overseas, whose native language is English and who have passed examns. which would admit them to Univs. or Tech. Colleges affiliated to Univs. in their own country, will be exempted, but candidates for degrees in Engineering must show they have a sufficient knowledge of Mathematics (*e.g.*, if from India, such as is implied by a satisfactory pass in the Intern. examn. of an Indian Univ.). Indian students must have passed an Intern. or Final Arts examn. Similarly the Baccalauréat-ès-Lettres or ès-Sciences will exempt from the Prelim. examn. for Arts or Science courses respectively or for Medical courses; and Certificates of Maturity or Grades similar to the French Baccalauréat which would entitle the holder to enter upon a regular course of study in the Univs. of his own country will similarly exempt other students from the continent of Europe.

*N.B.* A Certificate submitted as proof of title to admission to Univs. abroad should be accompanied by an authenticated declaration by a Government Official or Official of an Agency-General, Embassy, Legation, or Consulate of the country to which the applicant belongs, testifying that it has the alleged value. If in a foreign language, certificates should be accompanied by certified English translations.

Argentine Certificates giving admission to the Univ. of Buenos Ayres, the B.A. degree of St. John's, Shanghai, the first-class certificates of the Anglo-Chinese College, Amoy, and, if including Arabic, English, Maths., and—for Arts courses—French, the Egyptian Secondary Education Certificate, have been recognized as exempting from the Prelim. examn.

Applications for exemption on the ground of having passed any of the above-mentioned examns., or on other grounds, should be addressed to the Secretary of the Entrance Board, 81 North Street, St. Andrews.

DEGREES and courses leading thereto (v. also p. 11). The *M.A.* (ordinary) course (there is no B.A.) extends over 3 yrs. and, except at St. And. (v. p. 254), includes (for ordinary degree) subjects from 3 of the 4 departments of the Faculty, namely Lang. and Lit., Ment. Philos., Science, Hist. and Law. A candidate for the degree must not only have regularly attended, but also have duly performed the work of the classes in the qualifying courses. The first 2 yrs. may be taken in any of the Scottish Univs. The Senatus may accept attendance given and examns. passed at other Univs. specially recognized for the purpose, provided that qualifying courses for at least 2 yrs. are attended and the Degree examns. are passed in the Univ. granting the degree. For the purpose of reckoning duration of study an academic yr. is constituted by attendance on at least 1 course (Glas. and St. And., 2 courses) of study in each of the 3 terms. The degree is never conferred *honoris causa*. For *M.A.* (Hons.) 4 yrs.' study is generally required.

The *B.Phil.* and *B.Litt.* are conferred only by St. And. A candidate for either of these degrees must take the *M.A.* either before or along with it. The standard of the Final examn. is that of the *M.A.* Honours.

The *B.Com.* conferred by St. And., Aberd., and Edin. may be taken, under conditions as to place of study similar to those for the *M.A.*, after courses covering at least 9 terms.

The *Ed.B.* involves a 2 yrs.' course subsequent to the first 3 yrs. of study for a previous degree, in addition to Professional training or experience as a teacher.

The practical part of the training of students preparing for the *Teaching Profession* is provided by the several Provincial Committees, which likewise recognize attendance at Univ. classes as qualifying for their certificates.

*The B.Sc. in Pure Science.* The course for the ordinary degree covers 3 yrs. (Edinburgh 4 yrs.) and includes from 7 to 9 courses, of which 4 or 5 must be taken in the Univ. which is to grant the degree. The other 3 or 4 courses may be taken in other Univs. or Institns. approved, or under teachers recognized for this purpose, by the Univ. Court. The degree with Honours requires 4 yrs., and is of a standard not less high than that required for *M.A.* (Hons.).

*The B.Sc. in Applied Science* can be obtained in Agric. (Aberd., Edin., Glas.), Applied Chem. (Glas.), Tech. Chem. (Edin.), Engin. (Edin., Glas., St. And.), Mining Engin. (Edin., Glas.), Forestry (Aberd., Edin.), Pharmacy (Glas.), Pub. Health (Edin., Glas.), Vet. Sc. (Edin.). The course for the *B.Sc. in Applied Chem., Tech. Chem., Agric.* (Edin.),

or Vet. Sc. covers 4 yrs., in Pub. Health 18 months (after graduation in Med.), and in other branches 3 yrs.

*Higher Degrees in Arts and Science.* The D.Sc. in Pure Science, in Engin. (Edin., Glas., St. And.), Pub. Health (Edin., Glas.), Tech. Chem., Agric., and Vet.Sc. (Edin.), and the D.Litt. are open to graduates of 5 yrs.' standing. A thesis is required and, except in the case of a graduate of a Scot. Univ. with an Honours degree (St. And., a graduate of the Univ. granting the degree), research under supervision extending over 2 yrs. in the Univ. which is to grant the degree. These degrees are never granted *honoris causa*.

*Divinity.* The B.D. examn. of any of the Univs. is open to a graduate in Arts: (1) of the same Univ. who has taken a complete Theol. course in a Scot. Univ. or other specially recognized Institn.; (2) of any Scot. or other specially recognized Univ. who has completed his Theol. course, of which not less than 2 yrs. has been in the Univ. in which he proposes to take the B.D. The D.D. is honorary. The Gifford Lectures in Natural Theology are open to the general public.

*Law.* The B.L. course (3 yrs.) is open to students who have passed the Arts Prelim. or its equivalent, with Latin (Higher Standard) as one of the subjects. The LL.B. (3 yrs.) is open to graduates in Arts of a Univ. of the U.K. or any other specially recognized.

Of the B.L. course 1 yr. and of the LL.B. 2 yrs. may be spent in any specially recognized Univ. or School of Law.

St. And. does not at present provide full courses for or grant these degrees. The LL.D. is honorary.

*Medicine.* Three of the requisite 5 yrs. of medical study for the M.B. and Ch.B. may be spent in any Univ. of the U.K. or other Institn. specially recognized for the purpose or under a teacher recognized by the Univ. A candidate who has at any such Univ. completed a course and passed an examn. in Chem., Physics, or Biology qualifying for a degree in Science, Arts, or Med. may be exempted by the Senatus from the corresponding part of the M.B., Ch.B. examns. Aberd. and St. And. extend this concession to courses and examns. in Anatomy and Physiology qualifying for a degree in Science (St. And.—or Arts or Med.).

A graduate in Medicine of at least 24 yrs. of age who has, subsequent to graduation, been engaged for at least 1 yr. in attending the Med. (or Surg.) wards of a hospil., or in scientific work bearing directly on his profession, or in the Naval, Milit., Colonial (Aberd., Edin., Glas.), or, for the M.D. (St. And.—M.D. or Ch.M.), Pub. Health Med. Services, or 2 yrs. in practice not restricted to Surg. (or Med.), and passed the prescribed examn. and submitted a satisfactory thesis, may be admitted M.D. or Ch.M. as the case may be.

*Ph.D.* See p. 15.

*FEES.* The Matriculation, 2 gs. *per annum*; inclusive Tuition fees *per annum* in Arts are 15 gs., in Science 25 to 30 gs.; examn. fees for M.A., 7½ gs.; B.Sc., 9 gs.; M.B., Ch.B., 33 gs.; graduation, £1. Further information is given in the several Univ. sections.

RESEARCH OR SPECIAL STUDY may be prosecuted in a Univ. under

supervision by persons suitably qualified, whether graduates or not, admitted by the Senatus. Access to and the use of the Univ. laboratories, etc., may be obtained on such conditions as to payment and otherwise as the Univ. Court may determine. The title of Research Fellow may be conferred with or without a stipend on specially distinguished research students.

APPOINTMENTS COMMITTEES have been constituted in all the Univs. to help students to find employment.

SCHOLARSHIPS. Provision for affording Univ. instruction and maintenance to students of small means is probably nowhere more ample than in Scotland. Besides the numerous bursaries, etc., awarded by the Univs., and the Carnegie Trust benefactions (v. *infra*), the Provincial Committees for the Training of Teachers award bursaries, according to the necessities of students, of from £5 to £25, and travelling, hostel, and other special allowances, and Secondary Education Authorities may assist any duly qualified person resident in their areas to enter or attend a Univ., Training Coll., etc.

*Scholarships, etc., for Graduates.* The following are open to graduates of all the Scot. Univs.: (1) Carnegie Scholarships (£150) and Fellowships (£250) and grants in aid of Research. Application forms supplied by the Carnegie Trust, 22 Hanover St., Edinburgh. (2) Ferguson—six of £80 each for 2 yrs. for graduates in Arts. Ferguson Bequest Fund, 94 Bath St., Glasgow. (3) M'Cunn—two of £200 and two of £400 for 1 yr., for medical research. M'Cunn's Trustees, 160 West George St., Glasgow. (4) Shaw Philosophical—£200 for 5 yrs. for graduates in Arts (in the Patronage of Edinburgh Univ.).

CARNEGIE TRUST FOR THE UNIVERSITIES OF SCOTLAND. Offices at Merchants' Hall, Hanover Street, Edinburgh. Secretary, Jas. Robb, LL.B.; Treasurer, Sir John Ross, LL.D.; Asst. Treasurer, Jas. Davidson.

The annual income of the Trust amounts to £120,000, one half of which is devoted to (A) the improvement and expansion of the Universities of Scotland in the faculties of Science, Medicine, History, and Mod. Langs., and extending opportunities for scientific study and research, and Technical or Commercial Univ. education; the other half to (B) assisting Scottish students in the payment of Univ. class fees. Any surplus not required for (B) in any year is to be devoted to (A). Institutions in Scotland recognized by the Executive Committee of the Trustees as preparing students for graduation or as providing technical or commercial education of University level are entitled to participate as regards (A) and their students as regards (B). Any surplus not required for (A) or (B) may be devoted to Univ. Extension work.

The Regulations for Assistance in the payment of Class fees provide, *inter alia*, that applicants should hold the Leaving Certif. of the Scottish Educn. Dept. bearing evidence of such preliminary education as is required by the Univs. for their respective graduating curricula. Where for satisfactory reasons such Leaving Certif. has not been obtained, the Exec. Committee may accept instead what they deem equivalent

evidence of attainments, provided that no applicant will be eligible who has to pass any further prelim. examn. before completing his graduating curriculum. The annual report of the Exec. Committee contains reports of experts on the work of beneficiaries and lists of papers published by them.

Research Fellowships, Scholarships, and Grants awarded for 1921-22: St. Andrews—20, value £3770; Glasgow—28, value £1979; Aberdeen—14, value £1393; Edinburgh—30, value £4510. Total—92, £11,652.

Class Fees paid for 1921-22: St. A.—£5371 for 392 beneficiaries; G.—£25,153 for 2040; A.—£10,536 for 847; E.—£20,154 for 1500.

Under a Fourth Quinquennial Scheme of Distribution for the period from Oct. 1, 1920, to Sept. 30, 1925, there has been allocated a sum of £224,300, distributed thus: St. A. centre—£37,200; G.—£69,500; A.—£42,250; E.—£75,350.

THE SCOTTISH STUDENTS' INTER-UNIVERSITIES CONFERENCE. At this Conference, which is held annually, the students of the 4 Univs. meet to discuss matters of general interest to them all. The Conference is held in rotation at St. Andrews, Aberdeen, Glasgow, and Edinburgh. Its work, interrupted by the war, was resumed in Jan. 1920 at Edinburgh, where the 27th meeting was held. The Students' Representative Council of each Univ. sends 4 delegates, one of whom must be a woman-student. The convener of the International Academic Committee (v. *infra*) also attends and reports on the work of his committee. The President and Secretary of the Conference are the President and Secretary of the Students' Representative Council of the Univ. at which the Conference is held. A record of the work of each Conference is printed and distributed to each of the Univs. concerned. By providing a common meeting-place for the students of the Scottish Univs., this Conference is largely responsible for the feeling of solidarity which is a marked feature of student life in Scotland.

INTERNATIONAL ACADEMIC COMMITTEE. Committees are appointed annually by the Students' Representative Councils to collect and publish information regarding foreign study. A Central Committee of the four Univs. will maintain Consuls at foreign Univs. to assist students. Communications should be addressed to the Convener, International Academic Committee, S.R.C., The University, Glasgow.

LEGISLATION, 1922. An Act of Parliament was passed empowering the Univ. Courts to make Ordinances providing for the tenure of office of Principals and Professors being subject to limitations in respect of age, and for the admission of Univ. Lecturers or Readers to the Senatus. The Act also admits to membership of the General Council of the Univ. during their tenure of office Lecturers or Readers in the Univ. who have held office for a year.

# UNIVERSITY OF ABERDEEN

CHANCELLOR—His Grace THE DUKE OF RICHMOND AND GORDON, K.G.  
G.C.V.O., C.B.

VICE-CHANCELLOR AND PRINCIPAL—Very Rev. Sir GEORGE ADA  
SMITH, M.A., D.D., LL.D., Litt.D., F.B.A.

RECTOR—Rt. Hon. Sir ROBERT S. HORNE, G.B.E., P.C., K.C., M.A.  
LL.B.

SECRETARY OF THE UNIVERSITY—H. J. BUTCHART, D.S.O., B.L.

CLERK AND REGISTRAR OF GENERAL COUNCIL AND LIBRARIAN—P.  
ANDERSON, M.A., LL.B.

## UNIVERSITY COURT

PRESIDENT—THE RECTOR.

THE PRINCIPAL, *ex officio*.

THE LORD PROVOST OF ABERDEEN,  
*ex officio*.

J. E. CROMBIE, M.A., LL.D.

Sir JOHN FLEMING, LL.D.

H. J. GRAY, M.A., B.L.

D. M. M. MILLIGAN, M.A.

GEORGE DUNCAN, M.A.

GEORGE SMITH, M.A., LL.D.

J. SCOTT RIDDELL, M.V.O., C.B.E.  
M.A., M.B., C.M., LL.D.

Prof. MATTHEW HAY, M.D., LL.I

Prof. ASHLEY W. MACKINTOSH  
M.A., M.D.

Prof. J. B. BAILLIE, O.B.E., M.A.  
D.Phil.

Prof. H. M. MACDONALD, O.B.E.  
M.A., F.R.S.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

*Accounting & Business Methods*  
Davidson, H. A., B.Sc., C.A. Lectr.

*Agriculture*, v. also Eng., Nat.  
Hist., Vet. Hyg. [Lectr.  
Profeit, W. J., M.A., B.Sc. Agr.  
Donald, G., B.Sc. Agr. Asst.  
Grant, John, M.A., C.A. (Agr.

Book-keeping)  
Findlay, W. M. (Seed Testing)

*Agric. Botany*  
Clark, R. M., B.Sc., F.L.S. Lectr.  
Coutts, E. H. M., M.A., B.Sc. Asst.

*Agric. Chemistry*  
Hendrick, J., B.Sc. Lond.  
Strathcona-Fordyce Prof.  
Hill, Alfred, B.Sc., B.Sc. Agr. Asst.  
Milne, G., B.Sc. Asst.

*Anatomy*, v. also Embryol.  
Reid, R. W., M.D., F.R.C.S.

Reg. Prof.  
Lockhart, R. D., M.B. Lectr.  
Don, A. V. R., Ch.M. Asst.  
Mulligan, J. H., M.B. Asst.

*Art*  
Kelly, W., LL.D. (Principles c  
Archit.) Lectr.  
Rollo, R. Leslie (Hist. of Archit.  
Lectr.  
Townend, H. (Painting) Lectr.  
Profs. Baillie and Harrower Lectrs

*Banking*  
Cowie, R. H. Lectr.

*Bio-Chemistry*  
Beard, E., B.Sc., A.I.C. Lectr.

- Biology*, v. Nat. Hist.  
*Botany*, v. also Agric.  
 Craib, W. G., M.A., F.L.S. Reg. Prof.  
 Skene, MacG., D.Sc. Lectr. in Veg. Physiol.  
 Barnett, Euphemia C., B.Sc. Asst.  
 Downie, D. G., B.Sc., B.Sc. (For.) Edin. Asst.
- Celtic*  
 MacDonald, John, M.A. Lectr.
- Chemistry*, v. also Agric.  
 Findlay, Alexr., M.A., D.Sc., Ph.D. Leip. Prof.  
 Gray, F. W., M.A., D.Sc. Lectr.  
 Thomas, Wm., M.Sc. Wales, B.A. Camb., A.I.C. Lectr.  
 Reade, T. H., M.Sc. Birm., B.A. Camb., A.I.C. Lectr.  
 Evans, W. J. R., B.Sc. Wales. Asst.  
 Humphries, J. E., M.Sc. Wales, B.A. Lond. and Camb. Asst.
- Classics*  
 Harrower, J., LL.D. Glas., M.A. (Greek) Reg. Prof.  
 Robertson, Mary W. U., M.A. (Lectr. in Gk. Hist.) Asst.  
 Mordaunt, Frances G., M.A. (Lectr. in Gk. Hist., Lit. and Art) Asst.  
 Souter, A., M.A., D.Litt. (Humanity) Reg. Prof.  
 Smith, A. J., M.A., D.Litt. (Latin) Lectr. & Asst.  
 Weir, R., M.A. (Rom. Hist.) Lectr. & Asst.  
 MacLennan, W. G. D., M.A. Asst.
- Economics*, v. Pol. Econ.  
*Education*  
 Clarke, J., M.A. Belf. Lectr.  
 McClelland, W. W., M.A., B.Sc., Ed.B. Edin. Lectr.
- Embryology*  
 Low, A., M.A., M.D. Lectr.
- Engineering, Agricultural*  
 ..... Lectr.  
 Stewart, F. R., B.Sc. (Eng.) Glas. Asst.
- Cruickshank, A., M.C.I. Asst.
- English*  
 Jack, A. A., M.A. Glas., LL.M. Camb. Reg. Prof. of E. Lit.  
 Taylor, W. D., M.A. Glas., B.A. Ox. & Aberd. Lectr.  
 Abbott, C. C., M.A. Lond., B.A. Camb. Lectr.  
 Jack, P. M., M.A. Asst.
- Fisheries, Scientific Study of*  
 Fulton, T. A. W., M.D. Edin. Lectr.
- Forestry* [Lectr.  
 Leslie, P., M.A., B.Sc., B.Sc. Agr.  
 Fraser, G. K., M.A., B.Sc., B.Sc. For. Lectr. in Soils.
- Forest Botany and Entomol.*  
 Watt, A. S., B.A. Camb., M.A., B.Sc. Agr. Lectr.
- French*  
 Casati, E., L. ès L. Lyons Intm. Lectr. French and Lectr. Comml. F.  
 Harper, Margaret G., M.A. Asst.  
 Morfin, J. Asst.  
 Mowat, J. L., M.A. Asst.
- Geography*  
 McFarlane, J., M.A. Edin., M.Com. Manc., B.A. Camb. Lectr.
- Geology*  
 Gibb, A. W., M.A., D.Sc. Prof.  
 Smith, Margaret, M.A., B.Sc. Asst.
- German*  
 Bruford, W. H., M.A. Camb. Lectr.  
 Jamieson, Ruth C., M.A. (Lectr. in G. Hist.) Asst.  
 Dieth, E., Ph.D. Zür. Asst.
- Hebrew and Semitic Langs.*  
 Gilroy, J., D.D. St. And., M.A. Reg. Prof.
- History*, v. also Law, Theol.  
 Terry, C. S., M.A., Litt.D. Camb., Mus.D. Edin. Burnett-Fletcher Prof.  
 Simpson, W. D., M.A. Lectr.  
 Kellas, J., M.A. Asst.



- Law, v. infra*
- Logic* [Reg. Prof.  
Davidson, W. L., M.A., LL.D.  
Souter, Wm., M.A. Asst.
- Mathematics*  
Macdonald, H. M., O.B.E., M.A.,  
F.R.S. Prof.  
Goodwillie, J., M.A. Camb. &  
Edin., B.Sc. Edin. Lectr. & Asst.
- Barron, Williamina A., M.A., B.Sc.  
Asst.
- Medicine, v. infra*
- Natural History, v. also Bot.,  
Fish.* [Reg. Prof.  
Thomson, J. A., M.A., LL.D. Edin.  
Lectrs. :  
Rennie, J., D.Sc. (Parasitology)  
Neill, R. M., M.A. Glas. (Zool.)  
Assts. :  
Faulkner, Gwendoline H., B.Sc.  
Edin.  
Morrison, Lewis, B.Sc. (Agr.)  
Asst. in Agr. Zool.
- Philosophy, Moral, v. also Logic*  
Baillie, J. B., O.B.E., M.A. Camb.,  
D.Phil. Edin. Reg. Prof.  
Mitchell, J. S., M.A., B.Sc. Glas.  
(Pol. Sc. & Sociol.)  
Lectr. & Asst.
- Philosophy, Nat.*  
Thomson, G. P., M.A. Camb. Prof.  
Fyvie, W. W., D.Sc. Lectr.  
Geddes, A. E. M., O.B.E., M.A.,  
D.Sc. Lectr.  
Jack, Jessie M., M.A. Asst.
- Physiology* [Reg. Prof.  
MacWilliam, J. A., M.D., F.R.S.  
Reid, C., M.A., B.Sc., M.B., Ch.B.,  
D.P.H. Camb. (Expl. P.) Lectr.  
Fyfe, G. M., M.B. Asst.  
Orr, J. B., D.S.O., M.A., D.Sc.,  
M.D. Glas. Research Lectr. (P. of Nutrition).
- Political Economy, v. also Stats.*  
Gray, A., M.A. Edin. Jaffrey Prof.  
Macdonald, Annie, M.A. (Lectr. in  
Pub. Finance) Asst.
- Birnie, A., M.A. Edin. (Econ. Hist.)  
Lectr.
- Polit. Sc., v. Philos.*
- Psychology, Comparative*  
McIntyre, J. L., O.B.E., M.A.  
Edin. & Ox., D.Sc. Edin. Anderson Lectr.
- Public Speaking*  
Mursell, W. A. Lectr.
- Spanish*  
Davidson, C., M.A. Lectr.
- Statistical Methods*  
Tocher, J. F., D.Sc. Lectr.
- Theology*  
Baird, A. C., M.A., B.D., B.Sc.  
Glas. (Bibl. Crit.) Reg. Prof.  
Cowan, H., M.A. Edin., D.C.L.  
Durh., D.Th. Geneva, D.D.  
(Church Hist.) Reg. Prof.  
Fulton, W., M.A., D.D., B.Sc.  
Glas. (Systematic T.) Prof.
- Veterinary Hygiene*  
Brown, Wm., M.R.C.V.S. Lectr.
- Zoology, v. Nat. Hist.*
- Law**
- Scots L., Roman L., Jurispr.*  
Stuart, A. M., K.C., LL.B. Edin.,  
M.A. Prof.
- Constit. L. and Hist.*  
Williamson, R. M., LL.B. Edin.,  
M.A. Lectr.
- Conveyancing*  
Morrison, A. C., O.B.E., M.A. St.  
And., LL.B. Glas. Lectr.  
Masson, R. P., M.A., LL.B. Asst.
- Internat. L., Public and Private*  
Duncan, G., M.A. Lectr.
- Procedure and Evidence & Merc.  
Law for Comm. Students*  
Blacklaw, A., M.A. Clark Lectr.
- Medicine** (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)
- Bacteriology, v. Path.*

<i>Forensic Med.</i>		Duguid, J. B., M.B.	Asst.
Hay, M., M.D., LL.D. Edin.	Prof.	Cruikshank, J., M.D. Glas.	
Richards, R., M.A., M.D., F.R.C.S.E.	Asst.	Research Lectr. in P. (Cancer) and Lectr. in Bacteriology.	
Williamson, G., M.A., M.B. (Med. Ethics)	Lectr.	Lockhart, Jeannie, M.P.S. Asst. (Cancer Research).	
<i>Materia Medica</i>			
Marshall, C. R., M.A. Camb., M.D. Manc., LL.D.	Reg. Prof.	<i>Public Health</i>	
Hendry, A. W., M.D.	Asst.	Kinloch, J. P., M.D. Glas.	Lectr.
Davidson, Bessie M., M.B. St. And.	Asst.	Berry, D. W., M.B.	Asst.
<i>Medicine</i> [Reg. Prof.]		<i>Surgery</i>	
Mackintosh, A. W., M.A., M.D.		Marnoch, J., C.V.O., M.A., M.B., C.M.	Reg. Prof.
Anderson, A. G., M.A., M.D., M.R.C.P. Lond.	Asst.	Colt, G. H., M.B., B.Ch. Camb., F.R.C.S.	Asst.
<i>Midwifery</i> [Reg. Prof.]		<i>Tropical Medicine</i>	
McKerron, R. G., M.A., M.D.		Williamson, G. A., D.T.M. Liv., M.A., M.D.	Lectr.
Semple, R., O.B.E., M.D.	Asst.		
<i>Pathology</i> [Wilson Prof.]		<i>Tuberculosis</i>	
Shennan, T., M.D., F.R.C.S. Edin.		Stewart, I. S., M.D. Edin.	

## GENERAL INFORMATION (v. also p. 219)

The "University and King's College of Aberdeen," founded under a Papal Bull in 1494, and the "Marischal College," founded in 1593 by George Keith, Earl Marischal, were reconstituted in 1860 as "The University of Aberdeen." Certain of the original buildings remain, notably the Chapel (A.D. 1500).

The LIBRARY, founded in 1500, has 250,000 vols. and 200 Incunabula, some unique. It is especially rich in Celtic literature, and books bearing on the history, topography, and antiquities of the Scottish Highlands, and Classical Archæology. Annual budget about £3500. MUSEUMS: Anthropological (illust. cat. rs.), Surgical (2500 specimens and 600 instruments), etc. Besides the usual LABORATORIES there is the Rowett Institute of Research in *Animal Nutrition* near Bankhead, with departments of Physiology, Bio-Chemistry, Bacteriology and Pathology, and attached Animal Husbandry section for practical experiments in feeding, etc. It is under the management of a joint committee of the Univ. and the N. of Scotland College of Agric. Hospitals available for clinics: Infirmary, 230 beds; Children's, 85; Fever, 100; Lunatic Asylum, 700.

DEGREES, ETC. (v. p. 221). For Diploma courses in Agric. (3 yrs.) and Forestry (2 yrs.) there is a preliminary examn. in English and Maths. The papers in the Final examn. in Agric. are the same as those set for the B.Sc.Agr. The only other Diploma conferred is the D.P.H. Univs. outside the United Kingdom which have been recognized by the Univ. Court *pro tanto* as institutions in which 3 of the requisite 5 yrs. of medical study may be taken, provided that the prescribed conditions with reference to such study are fulfilled: Bom., Calc., Mad., Adel., Melb., Syd., N.Z., S. Africa, Dal., Queen's (Kingston), Tor., McGill, Chic., Corn., J.H.U., Harv., Stanf., Mich., Penn., Yale. Individual teachers in other Univs. may be recognized upon satisfying

the Univ. Court with respect to their courses. The following have been recognized in respect of courses and examns. in Bot., Zool., Biol., Physics, and Chem. qualifying for a degree in Science or in Arts or in Med.: Bom., Calc., Mad., All., Panj., Rangoon, Melb., Syd., Adel., Queen's (Kingston), McGill, Tor., Manit., S. Africa. The courses and examn. in Anat. and Physiol. for the Science degree of the Univ. of Cape Town have been recognized.

FEES (v. also p. 222). Inclusive fees for tuition: B.D., 40 gs.; LL.B., 40 gs. (28 gs. for a M.A. of the Univ.); B.L., 30 gs.; M.A. and B.Sc. taken together, 112½ gs.; M.A. and B.Com., 75 gs.; B.Sc. and B.Com., 112½ gs.; M.B., Ch.B., 126 gs.; M.A., M.B., Ch.B., 156 gs.; B.Sc., M.B., and Ch.B., 168 gs.; M.A., B.Sc., M.B., and Ch.B., 202 gs. The total cost of the whole medical curriculum, including hospital fees, classes, matricn., and degree fees, is usually about £236. The degree fees for the Doctorates are from 10 to 20 gs. The fee for the D.P.H. is 8 gs.

SCHOLARSHIPS, ETC., for graduates (v. also p. 223) about 25; aggregate annual value about £1600.

RESIDENCE. No Univ. Hostel. List of lodgings kept by Students' Repve. Council.

PUBLICATIONS. *Calendar* (Sept.), 4s. 6d.; *Univ. Review*, 7s. 6d. p.a. (3 issues); *Students' Handbook* (Nov.), 1s.; *Univ. Libr. Bulletin*, 2s. 6d. p.a. (2 issues).

## THE YEAR 1921-22

SPECIAL EVENTS. Visit of H.M. the Queen on Sept. 12, 1922, when she received the degree of LL.D., and formally opened the Rowett Institute of Research in Animal Nutrition.

BENEFACTIONS. The late Miss Fyfe-Grant, 4 Medical Bursaries of £25 p.a. each for 4 yrs.; Dr. Alexr. Kilgour, £31,000 towards endowment for Chair in Geology and scholarships in Nat. Sc. and Nat. Hist.; Mr. and Mrs. G. F. Todman of Sydney, £1000 for cancer research; W. Robbie bequest, £2500.

NEW POST. Chair in Geol. NEW BUILDINGS for Botany Dept. in course of erection.

OTHER DEVELOPMENTS. Fine Art recognized as a subject qualifying for M.A. degree; new ordinance for degree of B.Sc.; new regns. for diploma in Agr.; vacation course (with excursions to places of interest), dealing with Literature, Art, Social and Historical Studies, and Science.

STUDENTS. Total, matriculated, 1600 (including women, 533); graduating, 1506; diploma, 83; research, 11. From overseas: Africa, 20; Jamaica, 9; India, 14; elsewhere, 9. Vacation course (July 17-28), 48.

HONORARY DEGREES. D.D.—P. Dunn, Wm. F. Lofthouse, G. Pittendrigh, R. H. Strachan, G. Walker. LL.D.—T. W. Griffith, Sir T. Jaffrey, W. M. MacBean, John Masefield, J. Q. Rowett, Rt. Hon. W. H. Taft, C. Hamilton Turner.

OTHER DEGREES. M.A.—136 (including women, 68); Ed.B.—1; B.Sc.—25 (women, 10); B.Sc.Agr.—25 (1 woman); B.Sc.For.—7; B.Com.—5; B.D.—4; LL.B. and B.L.—10 (1 woman); M.B., Ch.B.—125 (women, 36); Doctors—12; Dip.P.H.—4; Dip.Agr.—9.

RESIGNATION. Prof. C. Niven.

EXTERNAL WORK. Lectures on Art, 112; Tutorial Classes in Economics, 45; Engl. Lit., 41; Psychology, 44; Geog., 23.

# UNIVERSITY OF EDINBURGH

CHANCELLOR—Rt. Hon. THE EARL OF BALFOUR, K.G., O.M., D.C.L.

VICE-CHANCELLOR AND PRINCIPAL—Sir J. ALFRED EWING, K.C.B.,  
M.A., D.Sc., LL.D., F.R.S.

RECTOR—Rt. Hon. D. LLOYD GEORGE, O.M., D.C.L., LL.D., M.P.

SECRETARY TO THE UNIVERSITY—WILLIAM WILSON, M.A., LL.B.,  
Advocate.

## UNIVERSITY COURT

PRESIDENT—THE RECTOR, *ex officio.* J. ROBERTON CHRISTIE, LL.B.,  
K.C.

THE PRINCIPAL, *ex officio.* Sir GEORGE A. BERRY, M.B., M.P.

THE Rt. Hon. THE LORD PROVOST  
OF EDINBURGH, *ex officio.* J. B. CLARK, M.A.

THE Hon. LORD BLACKBURN. Prof. T. P. LAIRD, M.A., C.A.

THE Hon. LORD CONSTABLE. Prof. T. HUDSON BEARE, B.A.,  
B.Sc., M.I.C.E.

Judge F. J. ROBERTSON. Prof. Sir RICHARD LODGE, M.A.,  
LL.D.

R. M'KENZIE JOHNSTON, M.D. Prof. J. RITCHIE, M.A., M.D.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

*Accounting and Business Method*  
Laird, T. P., M.A., C.A. Prof.  
Johnston, C. M'K., C.A. Asst.

*Actuarial Science*  
Robertson, W. A., F.F.A. Lectr.  
Gunn, G. O., F.F.A. Lectr.

*Agriculture and Rural Economy*,  
v. also Bot. and Forestry  
Watson, J. A. S., B.Sc. Prof.  
More, J. A., B.Sc. Lectr.

*Agric. and Forest Entomol.*  
MacDougall, R. S., M.A., D.Sc.  
Reader.

*Anatomy*  
Robinson, A., M.D. Prof.  
Jamieson, E. B., M.D. Lectr.

Wood, W. O., M.D., Ch.M. Lectr.  
Stump, C. W., M.B. Asst.  
Jardine, F. E., M.B. (A. and Ap-  
plied A.) Lectr.

*Anatomy, Comparative*  
Bradley, O. C., M.D., D.Sc. Lectr.  
Grahame, Tom, M.R.C.V.S. Asst.

*Anatomy, Morbid*  
Alexander, W. A., M.B. Lectr.

*Anthropology and Prehistoric  
Archæol.* [Munro Lectr.  
Macalister, Prof. R. A. S.

*Arabic*  
Bell, Richard, M.A., B.D. Lectr.

*Ari (Fine Art)*  
Brown, G. Baldwin, M.A. Ox. Prof.

- Astronomy*  
 Sampson, R. A., M.A. Camb., D.Sc., F.R.S. Reg. Prof.  
*Banking*  
 M'Neil, A., S.S.C. Bruce Lectr.  
*Biology*, v. Nat. Hist.  
*Botany*, v. also Forestry  
 Smith, Wm. Wright, M.A. Reg. Prof.  
 Smith, J. L. S., M.A., B.Sc. (Forest B.) Lectr.  
 Watt, Sir G., C.I.E., M.B., C.M., LL.D. Aberd. & Glas., F.L.S. (Indian Forest Trees) Lectr.  
 Matthews, J. R., M.A., B.Sc. Lectr.  
 Wilson, M., D.Sc. (Mycol. and Bacteriol.) Lectr.  
 Graham, R. J. D., D.Sc. (Plant Physiol.) Lectr.  
 ..... Asst.  
*Celtic Languages, etc.* [Prof.  
 Watson, W. J., M.A. Ox., LL.D.  
*Chemistry*  
 Walker, Sir J., D.Sc., F.R.S. Prof.  
 Dobbin, L., Ph.D. Lectr.  
 Kay, S. A., D.Sc. Lectr.  
 Rule, H. G., Ph.D., D.Sc. Lectr.  
 Shoesmith, John B., M.Sc. Lectr.  
 Ross, J. D. M., M.A., B.Sc. Lectr.  
 Bolam, T., M.Sc. Lectr.  
 Ludlam, E. B., B.A., D.Sc. Lectr.  
 Mitchell, R. K. S., B.Sc. Asst.  
 Mackenzie, Mary E., B.Sc. Asst.  
 Numbers, Annie H., M.A., B.Sc. Asst.  
 M'Michael, Dorothy, B.Sc. Asst.  
 Smith, A. M., B.Sc. Asst.  
 Smith, John, B.Sc. Asst.  
 Fairweather, D. A., M.A., B.Sc. Asst.  
 Stewart, C. P., M.Sc. Asst.  
 Stedman, Ellen, M.Sc. Asst.  
 Hoskings, A. A., B.Sc. Asst.  
 Coutie, A., B.Sc. Asst.  
*Chemistry in relation to Medicine*  
 Barger, G., M.A. Camb., D.Sc., F.R.S. Prof.
- Mackenzie, J. E., D.Sc., Ph.D. Lectr.  
 Stedman, E., B.Sc., Ph.D. Lectr.  
*Chemistry, Technical*  
 Cottrell, Allin, M.Sc. Lectr.  
*Classics*  
 Mair, A. W., M.A. Camb., Litt.D. Aberd. (Greek) Prof.  
 Fitzherbert, J. A., B.A. (Greek) Lectr.  
 Richmond, O. L., M.A. Camb. (Humanity) Prof.  
 Mill, J., M.A. (Latin) Lectr.  
 Mountford, J. F., M.A. (Latin) Lectr.  
 Nicolson, Catherine A., M.A. (Latin) Lectr.  
 Steuart, E. M., M.A. (Latin) Lectr.  
*Commerce, and Organization of Industry* [Lectr.  
 Oliver, W., B.Sc., A.M.I.C.E. (v. also Acc., Banking)  
*Commercial and Polit. Econ. and Merc. Law*, v. also Law  
 Nicholson, J. S., M.A. Lond., Sc.D. Camb. Prof.  
 Rees, J. F., M.A. (Econ. Hist.) Lectr.  
 Rankin, Mary T., M.A., D.Phil. Lectr.  
 Joynt, Thomas A., M.A. Lectr.  
 Fenelon, K. G., M.A. Lectr.  
 Carse, G. A., M.A., D.Sc. (Statistics and Math. Econ.) Lectr.  
*Divinity*  
 Paterson, W. P., LL.D. Penn., M.A., D.D. Prof.  
 Campbell, Colin, D.D. Gunning Lectr. 1922-23.  
 Curtis, W. A., M.A., D.Litt., D.D. Reg. Prof. of Biblical Criticism & Bib. Antiq.  
 ..... Asst.  
 Mackinnon, J., M.A., Ph.D., D.D. Reg. Prof. of Eccl. Hist.  
 Pringle-Pattison, A. S., LL.D. Prof. Gifford Lectr. on Natural Theol.

- Martin, Alex., D.D. Lectr. Burns, Mary, M.A., D. de l'U. Paris Lectr.  
 Simpson, J. Y., D.Sc. Lectr.  
 Mackintosh, H. R., D.Phil., D.D. Lectr. *Genetics*, v. Nat. Hist.  
 Watt, H., B.D. Lectr. *Geography* [Reader.  
 Welch, A. C., D.D., Th.D. Lectr. Chisholm, G. G., M.A., B.Sc.  
 Perry, W., D.D. Lectr. Lennie, Alice B., M.A., B.Sc.  
 Hughes, G. H., B.D. Lectr. Lectr. and Asst.  
 Morrison, J., D.D. Asst. *Geology*  
 Jehu, T. J., M.A., M.D. Reg. Prof.  
 Campbell, R., M.A., D.Sc. (Petrology) Lectr.  
 Finlay, T. M., M.A., B.Sc. (Palæont.) Lectr.  
 Craig, Robert, M.A., B.Sc. (Econ. Geol.)  
 Allan, Douglas A., B.Sc. Asst.  
*German and Teutonic Philol.*  
 Schlapp, O., Ph.D. Reader.  
 Eggeling, H. F., M.A. Lectr.  
 Barker, Marie, M.A. Asst.  
*Hebrew and Semitic Langs.*  
 Kennedy, A. R. S., D.D. Glas. and St. And. Prof.  
 ..... Asst.  
*Histology*, v. Physiol.  
*History*, v. also Comm., Div., Mil.  
 Lodge, Sir Richard, M.A. Ox., LL.D. Glas. Prof.  
 Heatley, D. P., M.A. (Political Science) Reader.  
 Balfour-Melville, E. W. M., M.A. Lectr.  
 Williamson, Mary G., M.A. Asst.  
*History, Ancient (Gk. & Roman)*  
 Giles, A. F., M.A. Lectr.  
*History, Ancient, and Palæog.*  
 Hannay, R. K., M.A. Glas. and Ox. Prof.  
 Lemon, Miss E., M.A. Asst.  
*History, Colonial and Indian*  
 Ewing, J., M.A. Lectr.  
*History, Const. Law and Const.*  
 Millar, J. H., M.A. Ox., LL.B. Prof.  
*Italian*  
 Purves, J., M.A. Lectr.  
*Law*, v. *infra*
- Economics*, v. Comm.  
*Education*  
 Darroch, Alex., M.A. Prof.  
 Fraser, D. Kennedy, M.A., B.Sc. Lectr.  
 Beckersteth, Marguerite E. Asst.  
 Young, Margaret, M.A. Asst.  
*Engineering*  
 Beare, T. H., B.A., B.Sc. Adel., M.I.C.E. Reg. Prof.  
 Kerr, W. Hume, M.A., B.Sc. (Drawing, etc.) Lectr.  
 Todd, J. B., B.Sc., A.M.I.M.E. (Surv. & Hydraulics) Lectr.  
 Gordon, W., B.Sc., A.M.I.M.E. (Strength of Mats.) Lectr.  
 Broadwood, R. G., B.Sc. (Forest Engin.) Lectr.  
 Stewart, David S., A.M.I.C.E. Lectr.  
 Patterson, C., A.M.I.Mar.E. Lectr.  
*English Lit. and Rhetoric*  
 Grierson, H. J. C., M.A. Aberd., B.A. Ox., LL.D. St. And. Reg. Prof.  
 Kitchin, G., M.A., D.Litt. Lectr.  
 Dickins, Bruce, M.A. Lectr.  
 Hislop, Gordon, M.A. Lectr.  
 Cumming, Lucy M., M.A. Asst.  
*Entomology*, v. Agric.  
*Forestry*, v. also Agric., Bot., Engin.  
 Stebbing, E. P., M.A. Prof.  
 Pike, J. L., M.A., B.Sc. Lectr.  
 Ferguson, D. C., B.Sc. Lectr.  
*French and Rom. Philol.*  
 Carolea, C., K.O.L., Ph.D., D.Litt. Liège, D.Jur. Cleve. Prof.  
 Moore, J. M., M.A. Lectr.

*Logic*, v. Philos.*Mathematics*

- Whittaker, E. T., M.A. Camb.,  
Sc.D., F.R.S. Prof.  
Horsburgh, E. M., M.A., D.Sc.,  
A.M.I.C.E. Reader.  
Gibb, D., M.A., B.Sc. Lectr.  
Baker, B. B., M.A., B.Sc. Lectr.  
Robinson, G., M.A. Lectr.  
Copson, E. T., B.A. Asst.

*Mathematics, Applied*

..... Reader.

*Medicine and Surgery*, v. *infra**Military History, Strategy, etc.*

- Taylor, Major J. O., LL.B. Lectr.

*Mining*

- [Lectr.  
Briggs, Prof. H. (Heriot-Watt Coll.)

*Music*

- Tovey, D. F., B.A., D.Mus. Ox.,  
Mus.M. Reid Prof.  
Shirlaw, M., Mus.D. Lectr.  
Dunn, J. P., Mus.B. Lectr.

*Natural History*

- Ewart, J. C., M.D., F.R.S. Prof.  
Ashworth, J. H., D.Sc., F.R.S.  
Prof. (Zool.).

- Patton, Major W. S., I.M.S. Lectr.  
Stephenson, J., M.B., D.Sc. Lectr.  
Purser, G. L., M.A. Lectr.  
Hogben, L., M.A., D.Sc. Lectr.  
Crew, F. A. E., M.D., D.Sc.  
(Genetics) Lectr.  
..... Asst.

*Philology*, v. French, Ger., Sansk.*Philosophy*

- Smith, N. Kemp, M.A., D.Phil.  
St. And., LL.D.  
Prof. of Logic and Meta-  
physics.  
Hardie, R. P., M.A. (Ancient P.)  
Reader.  
Anderson, J., M.A. Lectr.  
Gray, Marion I., M.A. Asst.

*Philosophy, Moral*, v. also Psych.

- Seth, J., M.A., LL.D. Prof.  
Barker, H., M.A. Lectr.

*Philosophy, Natural* [Prof.

- Barkla, C. G., M.A. Camb., D.Sc.  
Liv., F.R.S., Nobel Laureate.  
Darwin, C., M.A. Camb., F.R.S.  
Tait Prof.

- Carse, G. A., M.A., D.Sc. Lectr.  
Milne, J. R., D.Sc. Lectr.  
Dunbar, R. T., M.A., D.Sc. Lectr.  
Jack, D., M.A., B.Sc. Nichol Asst.  
Childs, B., D.Phil. Asst.  
Watson, W. H., M.A. Asst.  
Cranfield, R. V. Asst. (Mechanics).

*Physiology*

- Schafer, Sir E. A. Sharpey, LL.D.,  
F.R.S. Prof.  
Taylor, W. W., M.A., D.Sc. (Chem.  
P.) Lectr.  
Walker, May L., M.A., B.Sc., M.B.  
(Expl. P.) Lectr.  
Lim, R. K. S., M.B. (Histol.) Lectr.  
Bruce, A. N., M.D., D.Sc. (P. of  
Nervous System) Lectr.  
Ponder, E., M.B. Lectr.  
Dryerre, H., M.R.C.S. Asst.  
Purves, J. E., M.B. Asst.  
Charlton, Dorothy D. Asst.

*Pol. Econ., Sc.*, v. Comm., Hist.*Psychology*

- Drever, J., M.A., B.Sc. Lond.,  
D.Phil. Lectr.  
Collins, Mary, M.A., B.Ed. Asst.

*Public Health*

- Stewart, C. Hunter, M.B., C.M.,  
D.Sc. Prof.  
Young, J. B., M.B., D.Sc. Lectr.  
Hood, Helen R. T., M.B., D.P.H.  
Asst.

*Rhetoric*, v. English*Russian*

- [Lectr.  
Brennan, H. G., M.A., L. ès. L.

*Sanskrit and Comp. Philol.*

- Keith, A. Berriedale, M.A., D.Litt.,  
D.C.L. Reg. Prof.

*Semitic Langs.*, v. Hebrew*Spanish*

- Walton, L. B., B.A. Lectr.

*Statistics*, v. Comm.*Theology*, v. Divinity

*Zoology*, v. Nat. Hist.

## Law

*Administrative* [Lectr.]

Wood, P. F., M.A., LL.B., B.A. Ox.

*Civil*

Mackintosh, J., K.C., M.A. St.

And., B.A. Ox., LL.D. Prof.

Mackintosh, C., B.A., LL.B. Asst.

*Constitutional*, v. Hist.*Conveyancing*

Wedderburn, E. M., LL.B., D.Sc.,

W.S. Prof.

Grant, J. A. Asst.

*English Law* [Lectr.]

Burn-Murdoch, H., B.A., LL.B.

*Evidence and Procedure* [Lectr.]

Lewis, W. J., M.A. Ox., B.L., S.S.C.

*Industrial and Merc.*, v. also Comm.

Aitken, H., K.C. Lectr.

Lillie, J. A., M.A., LL.B. Asst.

*International, Private*

Dykes, D. O., M.A., LL.B. Lectr.

*Landlord and Tenant*

Cowan, John, K.C. Lectr.

*Public*

Wilson, Wm., M.A., LL.B.

Reg. Prof.

*Scots* [Prof.]

Henderson, R. C., K.C., LL.B.

Stevenson, W. H., M.A., LL.B.

Asst.

*Medicine* (for subjects of the first 2 yrs.—Anat., etc., v. *supra*)*Anæsthetics*

Jones, M. H. Howard, M.B. Demr.

*Bacteriology*, v. Path.*Children, Diseases of*

Fowler, J. S., M.D. Lectr.

Fraser, J., M.D. Lectr.

M'Neil, C., M.D. Lectr.

Carmichael, N. S., M.B. Lectr.

Thatcher, L., M.D. Asst.

Murray, J. M'N., M.B. Asst.

Hertzfeld, Gertrude, M.B. Asst.

*Dermatology, Clinical*

Walker, Sir N., M.D. Lectr.

Gardiner, F., M.D. Lectr.

Low, R. C., M.B. Lectr.

Aitken, R., M.D. Asst.

*Eye, Diseases of the*

Paterson, J. V., M.B. Lectr.

Sinclair, A. H. H., M.D. Lectr.

Traquair, H. M., M.D. Lectr.

Cameron, E. H., M.B. Lectr.

*Forensic Med.* [Reg. Prof.]

Littlejohn, H., M.A., M.B., B.Sc.

Loudon, J. A. L., M.B. Asst.

*Gynæcology, Syst. and Clin.*

Ferguson, J. Haig, M.D. Lectr.

Fordyce, W., M.D. Lectr.

Johnstone, R. W., M.A., M.D.

Lectr.

Davidson, H. S., M.B. Lectr.

Miller, D. A., M.B. (also in Midw.)

Asst.

*History of Med.* [Lectr.\*]

Comrie, J. D., M.A., B.Sc., M.D.

*Infective Fevers*

James, A., M.D. Lectr.

Ker, C. B., M.D. Lectr.

*Laryng., Ot., and Rhinology*

Turner, A. L., M.D. Lectr.

Fraser, J. S., M.B. Lectr.

Lithgow, J. D., M.B. Lectr.

Gardiner, W. T., M.B., Ch.B. Lectr.

Martin, G. E., M.B. Lectr.

Burton, M., M.B. Asst.

*Materia Medica*, v. also Pharm.

Cushny, A. R., M.A., M.D., LL.D.,

F.R.S. Prof.

Lambie, C. G., M.B. (also in Clin.

Med.) Lectr.

Crawford, J. H., M.B. Asst.

Mayrs, E. B., M.D. Asst.

Gibbs, O. S., D.Sc. Asst.

*Medicine and Clin. Med.*

Gulland, G. L., C.M.G., M.A.,

B.Sc., M.D. Prof.

Mathewson, G. D., M.D., B.Sc.

Asst. (Med.).

\* Lectr. in Clin. Med.



*Medicine, Clinical*, v. also Mat. Med.

Bramwell, E., M.D.

Moncrieff-Arnott Prof.

The Prof. of Therap. Sr. Lectr.

Fleming, R. A., M.D. Sr. Lectr.

Rainy, H., M.A., M.D. (also in Physical Methods) Sr. Lectr.

Watson, D. C., M.D. Sr. Lectr.

Matthew, E., M.D. Sr. Lectr.

Ritchie, W. T., M.D. Sr. Lectr.

Goodall, A., M.D. Lectr.

Eason, J., M.D. Lectr.

Lyon, D. M., M.B. Lectr.

Wemyss, H. L. W., M.D. Lectr.

Smith, G. L. M., M.B. Asst.

*Mental Diseases*, v. Psychiat.*Midwifery*, v. also Gyn.

Watson, B. P., M.D. Prof.

Miller, D. A., M.B. Asst.

Ballantyne, J. W., M.D. Lectr.

*Neurology*, v. Med. Clin.*Orthopædics*

..... Lectr.

*Pathology and Bacteriology*, v. also Anat.—Morb.

Smith, J. Lorrain, M.A., M.D., F.R.S. Prof.

Ritchie, J., M.A., M.D. Irvine Prof.

Reynolds, F. E., M.B. Lectr.

Macartney, J. E., M.B. Lectr. in B.

Findlay, G. W. M., M.D. Lectr.

Joe, Alex., M.B. Asst.

Macgregor, Agnes R., M.B. Asst.

Thomson, H., M.B. Asst.

Davidson, L. S. P., M.B. Asst.

Davidson, Jas., M.B. Asst.

Mackenzie, R. D., M.B. Asst.

Logan, W. R., M.D. Asst.

Rutherford, A., M.B. Asst.

MacCallum, P., M.B. Asst.

Buchanan, G., M.B. Asst.

Muir, R. Demr. of Methods.

*Pharmacology, Expl., and Mat. Med.*

Sillar, W. C., M.D., B.Sc. Lectr.

*Physical Methods*, v. Med. Clin.*Psychiatry*

Robertson, G. M., M.D. Prof.

Connell, E. H., M.B. Asst.

M'Allister, W., M.B. Asst.

*Pub. Health*, v. *supra**Surgery*

Thomson, H. Alexis, C.M.G., M.D., F.R.C.S. Prof.

Bell, F. Gordon, F.R.C.S. Asst.

*Surgery, Clinical* [Reg. Prof.]

Stiles, Sir Harold J., M.B., C.M.

The Prof. of Surg. Senr. Lectr.

Wallace, Sir D., C.M.G., M.B.

Senr. Lectr.

Miles, A., M.D. Senr. Lectr.

Dowden, J. W., M.B. Senr. Lectr.

Skirving, A. A. S., C.M.G., M.B.

Senr. Lectr.

Chiene, G. L., M.B. Senr. Lectr.

Stuart, W. J., M.B. Lectr.

Struthers, J. W., M.B. Lectr.

Wade, H., M.D. Lectr.

Fraser, J., M.D. Ch.M. Lectr.

Hartley, J. N. J., M.B. Lectr.

\* Graham, J. M., M.B., Ch.M. Lectr.

Watson, A. Pirie, M.B., Ch.M.

(Asst. in Surg.) Lectr.

Wilkie, D. P. D., O.B.E., M.D., Ch.M. Lectr.

*Surg. Pathology*

Graham, J. M., M.B., Ch.M. Lectr.

*Therapeutics*

Meakins, J. C., M.D. Prof.

Davies, H. W., M.B., B.Sc. Asst.

Robson, W., B.Sc. Asst.

*Tropical Climates Diseases*

Marshall, Lt.-Col. D. G., M.B., I.M.S. Lectr.

*Tuberculosis*

Philip, Sir R. W., M.A., M.D. Prof.

Hewat, A. F., M.B. Asst.\*

Simpson, J. C., M.B. Asst.

*Venereal Diseases*

Lees, David, M.D. Lectr.

Batchelor, R. C. L., M.B. Asst.

Liston, Mary F., M.B. Asst.

\* Lectr. in Clin. Med.

ASSOCIATED COLLEGES, in which Univ. courses are provided at Edinburgh.

EDINBURGH AND EAST OF SCOTLAND COLLEGE OF AGRICULTURE. Director, Alex. Lauder, D.Sc.

HERIOT-WATT COLLEGE. Principal, A. P. Laurie, D.Sc.

NEW (UNITED FREE CHURCH) COLLEGE. Principal, Alex. Martin, D.D.

ROYAL (DICK) VETERINARY COLLEGE. Principal, O. C. Bradley, M.D., D.Sc.

## GENERAL INFORMATION (v. also Scottish Univs.)

Originally the "Town's College," founded in 1583 by the Town Council under general powers granted by Royal Charter, April 14, 1582. The Old College on the site of "Kirk o' Field," the scene of the murder of Lord Darnley, was designed by Robert Adam, and completed in 1838. New buildings include the M'Ewan Hall (1888-97), in theatre form, which holds 2600 people and has a great electric organ. The Medical School of this Univ. has been famous for many generations; specially ample provision exists also for instruction and research in Theology (post-graduate school instituted 1919), Agric., Forestry, Engin., and Vet. Sc. Edinburgh is the seat of the Scottish Supreme Courts of Law.

LIBRARY, founded in 1580, 300,000 vols., 8000 MSS., includes special collections—Shakespearean, Sanskrit, Celtic, Persian, and Arabic MSS., Economics (Hodgson), Math. tables by E. Sang, transactions of Engin. Societies in Great Britain and America. MUSEUMS: Nat. Philos., Fine Art, Geol., Nat. Hist., Chem., Forestry, Agric., Entom. and Forest Zool. (Waterhouse collection of Coleoptera), Anat. (founded with the Monro collection in 1800; numerous specimens of Cetacea and human crania), Physiol., Mat. Med. (notable collections of medicinal and food substances, including those of Duncan and Christison), Forensic Med., Practice of Physic, Surg., Obst. (Simpson collection), Music and Musical Instruments. The Prof. of Botany is Regius Keeper of the Royal Bot. Garden. The Prof. of Astronomy is Astronomer Royal for Scotland and gives practical courses at the *Royal Observatory*. The LABORATORIES are especially well equipped for research in Anat., Anthropol., Bact., Chem. (a section of the new Laboratories at King's Buildings is now in use; when completed there will be accommodation for about 400 students), Engin. (notably Hydraulics, Strength of Materials, Elec. Engin.), Mat. Med., Path., Physics, Physiol., Psych., Pub. Health (Institute built 1902, costing £21,000). The Univ. has a table at the Millport Marine Station. HOSPITALS: the Royal Infirmary adjoining the Univ. provides over 900 beds for clinical teaching, in addition to the Children's, Maternity, and Fever Hospls., and Lunatic Asylums. Over 50 resident posts in these are given annually to Med. graduates.

DEGREES AND DIPLOMAS (v. Scottish Univs.). A diploma in *Education* is granted on completion of Univ. courses (1 yr.) and passing examns. in Psych., Theory and Hist. of E., and modern E. Systems and Problems. Candidates must have attended a course of Professional training or have had at least 3 yrs.' experience as a teacher, and must have completed a graduation course in Arts. Diplomas are also granted in *Actuarial Mathematics* (2 yrs.), *Forestry* (2 yrs.—certificate only, 1 yr.—open only to ex-Service men), *Geography* (open to graduates or students about to graduate in Arts or Science), and a Diploma and a Certif. in Social Study.

A candidate for the B.Sc. in *Vet.Sc.* must (i.) have passed the Prelim. examn. for degrees in Sc., (ii.) have been engaged in Vet. study for 4 yrs., (iii.) have a registrable qualification, (iv.) have attended certain specified courses, including 1 yr. of study in this Univ. The Royal (Dick) Vet. Coll., Edin., provides certain of the qualifying courses.

The 1st examn. for the B.Sc. in *Pub. Health* is open to graduates in Med. of Univs. of the U.K., or McG., Queen's (Ont.), Panj., Harv., Bruss., or Würz., on conditions which include study during 5 mos. in the Edin. Pub. Health Lab. The 2nd examn. may not be taken until 6 mos. after passing the 1st.

Diplomas in *Pub. Health* (1 yr. course), in *Tropical Med. and Hygiene* (16 mos.), and in *Psychiatry* (1 yr.), are open to graduates of the Univ. and registered Med. practitioners.

Candidates for the *Mus.B.* must have passed the Arts or Sc. Prelim. examn., or its equivalent, and attended a course in this Univ. during a whole winter session. A *Mus.B.* of 3 yrs.' standing may offer himself for the *Mus.D.* (which may also be conferred *honoris causa*) as Composer, as Executant, or as Theorist or Historian.

#### RECOGNITION OF INSTITUTIONS AND TEACHERS outside the United Kingdom:

(a) For exemption from one (not the final) year of the course for M.A. or for B.Com. and from attendance on classes in and examn. in two subjects for the Ordinary Degree: the following Univs.—Alb., Dal., McG., Manit., Queen's (Kingston), Tor., Adel., Melb., Syd., N.Z., S. Africa, All., Bom., Calc., Mad., Panj., Paris, Tokyo, Osaka, Sendai; graduates of the American institutions listed in Appendix XXV.

(b) For some of the courses for the B.Sc.: Madras Coll. of Agric., Colls. affiliated up to B.A. and B.Sc., and Engin. Colls. affiliated to the Indian Univs., Univs. and Polytech. Sch. supported and regulated or recognized by Govts. in Europe.

(c) For admission as graduate in Arts to the LL.B. examn.: the Univs. of All., Calc., Mad. V. also (f).

(d) For 2 of the 3 yrs.' study for LL.B.: McGill Univ., Madras Law Sch., Law Coll., Trevandrum, Ripon Coll., Calc.

(e) For 3 of the 5 yrs. of Med. study: recognized teachers in Singapore (in Physiol. and Practice of Med.) and Wellington, S. Africa (in Chem.).

(f) For admission of graduates from these instittns. to study for the Ph.D. degree (General Recognition is also granted to them in terms of the various Graduation Ordinances): the following Univs.—Dal., King's Coll. (N.S.), Laval, McG., Manit., Queen's (Ont.), Tor., Adel., Melb., Queensland, Syd., W. Aust., N.Z., Cape Town, S. Africa; all Colleges affiliated to these Univs.; Univs. and Colls. approved by the Asscn. of American Univs. V. App. XXV.

POST-GRADUATE COURSES in Medicine are held during the Summer and Autumn Terms and the *Summer Vacation*. Particulars obtainable from the Hon. Sec., P.-G. Courses in Med. Univ. New Buildings, Edinburgh. The Post-graduate School of Theology has issued a detailed list of courses for 1922-23, obtainable from the Sec., Prof. Kennedy, 33 Fountainhall Road. Graduates contemplating research in other Faculties should apply to the Deans. V. also p. 222.

SCHOLARSHIPS. Total annual value over £22,000; for graduates only, £6000. Most are open to colonial and foreign students. The Earl of Moray's Endowment provides over £1000 p.a. for *research*. V. also p. 223.

FEES. (N.B.—See also p. 222.) Inclusive tuition fees for LL.B., 42 gs.; B.L., 30 gs.; B.Sc. Engin., Agr., or Forestry, 90 gs., Mining, 105 gs., Pure Sc.,

100 gs. ; B.D., 33 gs. ; M.B., Ch.B., including Hospl. Fees, 177 gs. Combined M.A. and B.Sc., 120 gs. ; M.A. and B.Com. or LL.B., 70 gs. ; M.A. and B.L. 65 gs. ; B.Sc. in Agr. and in For., 135 gs. Graduation examns. : M.A., 7½ gs. ; B.D., 7½ gs. ; LL.B., 9 gs. ; B.L., 7½ gs. ; Mus.B., 15 gs. ; Mus.D., 15 gs. ; Ph.D., 10 gs. ; B.Sc., 9 gs. ; D.Sc., 15 gs. ; M.B., 33 gs. ; M.D., 21 gs.

HALLS OF RESIDENCE, ETC. For men : University Hall on a self-governing basis (information from Messrs. Whitson and Methuen, 21 Rutland Street). Board and lodging about £3 a week. For women : East Suffolk Rd., Craigmillar Park (Warden) ; Masson Hall, 31 and 32 George Square (Warden) ; and Muir Hall, 12 George Square (Warden), about £20 a term. Six months' notice generally necessary.

There is a Franco-Scottish Society for advising and assisting French students in Scotland and Scottish students in France. It has local centres at Glas., Aberd., and Dundee.

Indian Students' Adviser : Maj. J. E. Mackenzie, D.Sc.

UNIV. EXTENSION, ETC. The Univ. is now represented on the Advisory Committees for the management of the Tutorial Classes for adults instituted by the Edin. Educational Authority, in co-operation with the Workers' Educnl. Asscn. Summer Classes (4 weeks) for Teachers are held during vacation, the lecturers being drawn mainly from the Univ. staff.

OFFICIAL PUBLICATIONS. The *Calendar* (Aug.), 6s. ; the *Prelim. and Degree Examn. Pps.* (May and July), 5d. to 1s. 9d. a set (James Thin, 55 South Bridge). The *Students' Handbook* issued by the Students' Representative Council. Facilities for advanced Study and Research free on application.

## THE YEAR 1921-22

BENEFACTIONS. John Newland Endowment, £22,500 for Bursaries ; Edin. German Society, £120 (£50 for German Library and £70 for students' travelling expenses) ; Prof. Percy Nobbs, Toronto, a former student of Edin., £100 for Dept. of Fine Art ; Local Committee of British Asscn. Edinburgh Meeting, 1921, a fund for the travelling expenses of Advanced Science students ; London Burns Club Prize endowment ; Lord Lyell of Kinnordy, Books on American Geology ; J. C. Murray and T. H. Murray, books, etc.

NEW BUILDINGS, ETC. Another Section of the first of the King's Buildings on the Liberton site completed (all students of Chem. in the Faculties of Arts and Science are now being taught in this building) ; a temporary building purchased and re-erected on the Liberton site, occupied by Dept. of Geology and branch of Univ. Union ; extension of Dept. of Anat. for women students completed ; playing fields at Craiglockhart extended by about 20 acres.

LEGISLATION. New Ordinances provided for a revised course for B.Sc. (Ordinary and Hons.), and for a Degree of D.Sc., in Agric., and for a 4 yrs.' course for Degree of B.Sc. in Tech. Chem. The Univ. Court approved of Regns. for a Univ. Diploma and a Univ. Certif. in Social Study.

HONORARY DEGREES. D.D.—D. Cathels, J. R. Fleming, Prof. G. Fulliquet of Geneva, Principal E. M. Macphail of Madras Christian College, the Bishop of Peterborough. LL.D.—Prof. Sir I. B. Balfour, W. W. Buckland, Sir J. H. Croom, O. Elton, T. H. Morgan of Columbia Univ., H. Roger of Paris, Sir C. S. Sherrington, and Wm. Somerville ; R. H. Ferard, Sir J. R. Findlay, late John

Garton, G. F. Hill, Sir T. Middleton, J. W. Mollison, John Thomson. *Mus.D.*  
—A. Hollins, Prof. C. S. Terry.

OTHER DEGREES. M.A.—263 (including women, 111); M.B., Ch.B.—251 (women, 77); M.D.—49 (w., 5); B.Sc.—268 (w., 23); D.Sc.—6; B.D.—5; LL.B. or B.L.—28; Mus.B.—1; B.Ed.—7 (w., 4); B.Com.—20; D.Litt.—1; Ph.D.—14 (w., 1).

NUMBER OF STUDENTS. Preparing for First Degree in Arts, 1280, including women, 584; Science, 835 (w., 90); Med., 1683 (w., 361); Law, 81 (w., 7); Div., 26; Music, 9 (w., 4); for Diploma in Sc., 12. Post-grad. and research in Arts, 68 (w., 29); Med., 25 (w., 4); Sc., 25 (w., 4). Total: full-time, 4063, part-time, 606; previous year's totals, 4162, 724. New students, 1921-22, 1033; 1922-23, 888.

RETIREMENTS OF LECTRS. R. B. Kerr, Charles Tweedie, Mary Bartholomew, Sir J. W. B. Hodsdon.

EXTRA-MURAL WORK. Tutorial Class enrolments 1921-22, 2117. Among the Tutors were 5 Univ. Profs. and 8 Univ. Lectrs. Summer Classes for Teachers were held for 4 weeks during vacation, the lectrs. being drawn mainly from the Univ. Staff.

## UNIVERSITY OF GLASGOW

CHANCELLOR—THE EARL OF ROSEBERY AND MIDLOTHIAN, K.G., K.T.

VICE-CHANCELLOR AND PRINCIPAL—SIR DONALD MACALISTER, K.C.B.,  
M.A., M.D., D.C.L., LL.D., D.Sc., Ph.D.

RECTOR—THE RIGHT HON. EARL OF BIRKENHEAD, M.A., F.R.S.

DEAN OF FACULTIES—EMERITUS PROF. SIR H. C. CAMERON, M.D., LL.D.

SECRETARY TO THE UNIV. COURT—A. E. CLAPPERTON, B.L., LL.D.

CLERK OF SENATE—PROF. G. MILLIGAN, D.D., D.C.L.

REGISTRAR—ROBT. BROUGH.

LIBRARIAN AND KEEPER OF HUNTERIAN BOOKS AND MSS.—.....

CLERK OF THE GENERAL COUNCIL—A. CRAIG, LL.B., O.I.P.

### QUEEN MARGARET COLLEGE

Mistress—MISS F. H. MELVILLE, M.A., B.D.

### UNIVERSITY COURT

THE RECTOR, *ex officio*.

G. S. MIDDLETON, M.D., LL.D.

THE PRINCIPAL, *ex officio*.

R. A. DUFF, M.A., D.Phil.

THE LORD PROVOST OF GLASGOW,  
*ex officio*.

D. MACGILLIVRAY, M.A.

SIR JOHN U. PRIMROSE, Bt., LL.D.

Prof. MILLIGAN, D.D., D.C.L.

SIR THOS. DUNLOP, Bt., G.B.E.,  
LL.D.

Prof. G. A. GIBSON, M.A., LL.D.

Prof. T. H. BRYCE, M.A., M.D.,  
F.R.S.

J. BRUCE MURRAY.

Prof. LATTI, M.A., D.Phil.

DAVID MURRAY, LL.D.

### PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Anatomy</i>	Blair, D. M., M.B. (Regional A.)	
Bryce, T. H., M.A., M.D. Edin., F.R.S.	Reg. Prof. Weir, R. S., M.B.	Lectr.
Hutton, W. K., M.A., M.B., C.M.	Payne, W. J., M.B.	Demr.
	Lectr.* Thompson, E. J. T., M.B.	Demr.
Maclaren, Norman, Ph.D. (Em- bryology)	Davidson, A. M., M.B.	Demr.
	Lectr. Fleming, Amy, B.Sc.	Demr.*

\* At Queen Margaret Coll.

Dickson, Lillian, M.B.	Demr.*	Buchanan, C., B.Sc.	Asst.
Jacobs, Arthur, L.R.C.S.	Demr.*	Stevens, T. S., B.Sc.	Asst.
Fleming, J. P., M.B.	Demr.		
Nicol, T., M.B.	Demr.	<i>Chem., Physical</i>	
<i>Arabic</i>		Wright, Robert, M.A., D.Sc.	Belf. Lectr.
Weir, T. H., B.D., M.R.A.S.	Lectr.	Smith, R. C., M.A., B.Sc.	Asst.
<i>Astronomy</i>		<i>Classics</i>	[Prof.
Becker, L., Ph.D. Bonn.	Reg. Prof.	Davies, G. A., M.A. Camb. (Greek)	
Connell, J.	Lectr.	Rennie, W., M.A. (Greek and Hellenistic G.)	Lectr.
Ross, John	Demr.	Gomme, A. W., B.A. (Greek History)	Lectr.
<i>Botany</i>		Kitto, H. D. F., B.A. (Greek)	Asst.
Bower, F. O., Sc.D. Camb., D.Sc.		Phillimore, J. S., M.A. Ox., LL.D.	
Syd., LL.D. Aberd., F.R.S.	Reg. Prof.	St. And. (Humanity)	Prof.
Patton, D., M.A., B.Sc. (Morphology)	Lectr.	Burn, R., B.A. (Humanity)	Asst.
Thomson, J., M.A., B.Sc. (Physiology)	Lectr.	Nisbet, R. G., M.A. (Latin)	Lectr.
Wardlaw, C. W., B.Sc.	Asst.	M'Glynn, P., M.A. (Latin)	Lectr.
<i>Celtic</i>		<i>Divinity, v. also Hebrew</i>	
Calder, G., B.D., D.Litt. Edin.	Lectr.	Reid, H. M. B., D.D. St. And.	Prof.
<i>Chem., v. also Physiol.</i>		Milligan, G., D.D. Aberd., D.C.L.	
Henderson, G. G., D.Sc., F.R.S., LL.D. St. And., F.I.C.	Reg. Prof.	Durh. (Bibl. Crit.)	Reg. Prof.
Bolam, H. W., B.Sc. Edin., Ph.D.	Lectr.*	Main, A., M.A. Glas., B.A. Ox., D.Litt., D.D. (Church Hist.)	Reg. Prof.
Knox, J., D.Sc. Aberd.	Lectr.	<i>Economics, v. Pol. &amp; Social Econ.</i>	
Roberts, J., F.C.S.	Lectr.	<i>Education</i>	[Lectr
Henderson, A., M.A., B.Sc.	Lectr.	Boyd, W., M.A., B.Sc., D.Phil.	
Morrison, Jane, M.A.	Asst.*	<i>Embryology, v. Anat.</i>	
Walker, Mona M., B.Sc.	Asst.*	<i>Engineering, v. also Naval</i>	
Stewart, Eliz. C.	Asst.*	Goudie, W. J., D.Sc.	
M'Culloch, W. P., B.Sc.	Asst.	J. Watt Prof. of Theory and Practice of Heat Engines.	
Sword, J., M.A., B.Sc.	Asst.	Brown, R. M., B.Sc.	Lectr.
4 Research Assts.		Speirs, H. M., B.Sc.	Lectr.
<i>Chem., Organic</i>		Scobie, J., B.Sc.	Lectr.
Patterson, T. S., D.Sc. Lond. & Glas., Ph.D. Heid.		Vost, J., B.Sc.	Lectr.
Gardiner Prof.		Morrison, J. C., B.Sc.	Lectr.
M'Millan, A., M.A., D.Sc. (Analytical)	Lectr.	Small, J., B.Sc.	Lectr.
Tucker, S. H., B.A., M.Sc.	Lectr.	Tullis, J., B.Sc.	Lectr.
Coleman, Eva S. E., B.Sc.	Asst.	Thom, A., B.Sc.	Lectr.
Semple, Jean M., B.Sc.	Asst.	Geyer, E. W., B.Sc.	Asst.
Dunn, Edith F. M., B.Sc.	Asst.	Wilson, J., B.Sc.	Asst.
		Small, A. J., B.Sc.	Asst.

\* At Queen Margaret Coll.

- Engin., Civil and Mech.*  
 Cormack, J. D., C.M.G., C.B.E.,  
 D.Sc., M.I.C.E., M.I.M.E.  
 Rég. Prof.  
 Hewett, A. F., B.Sc. Young Asst.
- Engineering, Electrical*  
 Howe, G. W. O., D.Sc. Durh. and  
 Adel., M.I.E.E. J. Watt Prof.
- English Language and Literature*  
 Dixon, W. M., Litt.D. Dub., LL.D.  
 Aber. Reg. Prof.  
 Bickersteth, G. L., M.A. Lectr.  
 Alexander, P., M.A. Lectr.  
 Girvan, R., M.A. (Eng. Lang.)  
 Lectr.  
 Smart, J. S., M.A., D.Litt. Lectr.  
 Gray, Margaret M., M.A. Lectr.
- French*  
 Martin, C. A., M.A. Paris, O.I.P.,  
 Ch. L.H., C.G. Prof.  
 Pitoy, L. M., B.Sc., L. ès L. Phil.  
 Lectr.  
 Pitoy, Mary C., M.A. Lectr.  
 Ferguson, Marjorie, M.A. Asst.  
 Morand, Paul Asst.  
 De Richemond, René, L. ès L.  
 Asst.
- Geography*  
 Stevens, A., M.A., B.Sc. Lectr.  
 Grierson, Aileen, M.A. Asst.
- Geology* [Prof.  
 Gregory, J. W., D.Sc. Lond., F.R.S.  
 Tyrrell, G. W., A.R.C.Sc. Lectr.  
 Neilson, Agnes T. Asst.  
 ..... Baxter Demr.
- German*  
 Smith, H., M.A. St. And., Ph.D.  
 Marburg William Jacks Prof.  
 Clark, James M., M.A., Ph.D. Lectr.  
 Brown, James, M.A. Asst.
- Hebrew and Semitic Langs.*  
 Stevenson, W. B., D.D., D.Litt.  
 Edin. Prof.  
 Harris, E. J., M.A., B.D. Asst.
- History*, v. also Div., Law, Pol.  
 Econ.  
 Medley, D. J., M.A. Ox. Prof.  
 Browning, A., M.A. Lectr.  
 Brown, W. E., M.A. (British H.)  
 Lectr.  
 Miller, S. N., M.A. (H. and Antiq.,  
 Roman) Lectr.  
 Rait, R. S., C.B.E., M.A. Ox. (H.  
 and Lit., Scot.) Prof.  
 Douglas, David C., M.A. Asst.
- Humanity*, v. Classics
- Italian*  
 Grillo, Cav. E., M.A., Litt.D.  
 Flor., LL.D. Perugia Lectr.  
 Steen, J., M.A. Asst.
- Law*, v. *infra*
- Logic and Rhetoric*  
 Latta, R., M.A., D.Phil. Edin. Prof.  
 Russell, L. J., B.Sc., D.Phil. Lectr.  
 Levett, Margaret J., M.A. Lectr.\*  
 Haydock, G. H., M.A., B.Litt.  
 Asst.
- Mathematics*  
 Gibson, G. A., LL.D. Edin., M.A.  
 Prof.  
 M'Arthur, N., M.A., B.Sc. Lectr.  
 MacRobert, T. M., M.A., D.Sc.  
 Lectr.  
 M'Whan, J., M.A., Ph.D. Lectr.  
 Arthur, W., M.A. Lectr.  
 M'Kinnell, John, M.A., B.Sc.  
 Asst.
- Blades, R. F., M.A., B.Sc. Asst.  
 Rodger, Janet, M.A. Asst.
- Medicine and Surgery*, v. *infra*
- Metallurgy*, etc., v. p. 248.
- Mining*  
 Dron, R. W., A.M.I.C.E.  
 Dixon Prof.  
 ..... Asst.
- Naval Archit., including Marine Engin.*  
 Hillhouse, P. A., D.Sc. Harv.  
 John Elder Prof.  
 Evans, D. L., B.Sc. Lectr.  
 ..... Asst.

\* At Queen Margaret Coll.



- Philology, Comparative*  
 Pirie, J. W., M.A. Aberd. Lectr.
- Philosophy, Moral*, v. also *Logic and Psychol.*  
 Lindsay, A. D., C.B.E., M.A. Ox. Prof.  
 Macbeath, A., M.A. Lectr.  
 White, Alex. K., M.A. Lectr.  
 Phillips, I. W., M.A. Asst.
- Philosophy, Natural*  
 Gray, A., LL.D., F.R.S. Prof.  
 Green, G., M.A., D.Sc. Lectr.  
 Cochrane, Charles, M.A., B.Sc. Lectr.
- Allan, G. E., D.Sc. Birm.  
 Arnott and Thompson  
 Demr. in Expl. Physics  
 and Lectr. in Elec-  
 tricity.
- Houstoun, R. A., D.Sc., Ph.D.  
 (Physical Optics) Lectr.  
 Gray, R. C., M.A., D.Sc. Lectr.  
 Robertson, J., M.A., B.Sc. Asst.  
 Shearer, J. F., M.A., B.Sc. Asst.  
 Younger, A. J., M.A., B.Sc. Asst.
- Physics, Applied*  
 Gray, J. G., D.Sc. Prof.
- Physiology*  
 Paton, D. Noël, M.D., B.Sc.,  
 LL.D. Edin., F.R.S. Reg. Prof.  
 Watson, A. M. (Histology) Lectr.  
 Henderson, Pearl, B.Sc. (His-  
 tology) Lectr. & Muirhead Demr.  
 Shanks, W. F., B.Sc., M.B. Lectr.
- Physiolog. Chem.*  
 Cathcart, E. P., M.D., D.Sc.,  
 F.R.S. Gardiner Prof.  
 Wishart, G. M., B.Sc., M.B. Grieve Lectr.
- Polit. Econ.*  
 Scott, W. R., M.A., Litt.D. Dub.,  
 D.Phil., LL.D. St. And.,  
 F.B.A. Adam Smith Prof.  
 Scott, Nelly, B.A. (Econ. Hist.)  
 Lectr.  
 Smith, C. F., B.A. Asst.
- Political Philosophy*  
 Duff, R. A., M.A., D.Phil. Lectr.
- Psychology*  
 Watt, H. J., Ph.D. Würz., D.Phil.  
 Aberd. Lectr.
- Russian* [Sir William Weir Lectr.  
 Brennan, H. G., M.A. Lond.
- Social Economics*  
 Cunnison, James, M.A. Lectr.
- Theology*, v. *Divinity*
- Zoology*  
 Kerr, J. Graham, M.A. Camb.,  
 F.R.S. Reg. Prof.  
 Floyd, J. F. M., M.A. Ox. Lectr.  
 Dunkerly, J. S., B.Sc. Lond. Lectr.  
 Jepps, Margaret W. Asst.  
 A Research Asst.  
 Chumley, James Research Fellow.
- Law**
- Gloag, W. M., K.C., B.A. Ox.,  
 LL.D. Edin. Reg. Prof.
- Civil Law*  
 Muirhead, J. S., LL.B. Lectr.
- Const. Law and Hist.*  
 Mungo, D. B., LL.B. Lectr.
- Conveyancing* [Prof.  
 M'Kechnie, W. S., LL.B., D.Phil.
- Evidence and Procedure*  
 Lamond, R., LL.B. Lectr.
- Internat. Law, Public, and In-  
 ternat. Private Law*  
 Nicol, R. M., LL.B. Lectr.
- Jurisprudence, Genl.*  
 Mitchell, A. A., LL.B. Lectr.
- Mercantile Law*  
 Wright, T. G., LL.B. Prof.
- Medicine** (for subjects of first 2  
 yrs.—Anat., etc., v. *supra*)
- Bacteriology* [Gardiner Prof.  
 Browning, C. H., M.D.  
 ..... Lectr.

*Dermatology*

Nicol, J. W., M.B., C.M.  
 M'Call Anderson Mem. Lectr.  
 Smith, J. Ferguson, M.A., M.B.  
 Lectr.

*Ear and Throat and Nose,  
Diseases of, v. also Nose*

Gray, A. A., M.D. (Ear) Lectr.  
 Harper, James, M.A., M.B. Lectr.

*Electrical Diagnosis and Therapeutics*

Riddell, J. R., F.R.F.P.S.G. [Lectr.  
 Chapman, Katharine M., L.R.C.P.  
 Lectr.

*Eye, Diseases of the*

Ballantyne, A. J., M.D. Lectr.

*Forensic Medicine* [Reg. Prof.]

Glaister, J., M.D., F.C.S.  
 Lindsay, D. M., M.B. Asst.  
 Wylie, J., M.B. Asst.

*Infancy and Childhood*

Findlay, L., M.D., D.Sc. (Med.  
 Diseases) Lectr.  
 MacLennan, A., M.B. (Surgery  
 and Orthopædics) Lectr.  
 Tennent, Robert, M.B. Asst.

*Insanity*

Henderson, D. K., M.D. Lectr.  
 MacDonald, J. H., M.B., Ch.B.  
 (Psych. Med.)  
 Mackintosh Lectr.

*Materia Medica* [Reg. Prof.]

Stockman, R., M.D. Edin.  
 Campbell, David, M.A., B.Sc.,  
 M.B. Lectr.  
 Clark, G. H., M.D., D.P.H.  
 Weir Asst.

*Medicine* [Muirhead Prof.]

Hunter, W. K., M.D., D.Sc.  
 Cruickshank, J. N., M.B. Asst.  
 Honeyman, T. J., M.B. Asst.

*Medicine, Clinical*

Anderson, J. B. M., M.B. Lectr.  
 Jack, W. R., M.D., B.Sc. Lectr.  
 Henderson, J., M.D. Lectr.

*Medicine, Practice of* [Reg. Prof.]

Monro, T. K., M.A., M.D., C.M.  
 Allan, G. A., M.B. Asst.  
 Patrick, A., M.A., M.D. Asst.  
 Adams, D. K., M.A., B.Sc., M.D.  
 Asst.

*Midwifery*

Cameron, M., M.D. Reg. Prof.  
 Cameron, S. J., M.B.  
 Lectr. & Asst.  
 M'Lellan, A. N., M.B., C.M. Asst.

*Nose and Throat, Diseases of the*

Syme, W. S., M.D. Lectr.

*Obstetrics and Gynaecology*

Kerr, J. M. M., M.D. Muirhead Prof.  
 Hendry, J., M.A., B.Sc., M.B.  
 Asst.  
 Cameron, S. J., M.B. (Clin.) Lectr.  
 Shannon, David, M.B. (Clin.)  
 Lectr.  
 M'Intyre, D., M.B. Asst.

*Pathology*

Muir, R., M.A., M.D. Edin.,  
 Sc.D., F.R.S. Prof.  
 Dunlop, Ernest M., M.B. Lectr.  
 Blacklock, J. W. S., M.B. Asst.  
 Teacher, J. H., M.A., M.D.  
 St. Mungo-Notman Prof.  
 Burton, J. A. G., M.B., D.P.H.  
 Lectr.  
 Marshall, Alice J., M.B.  
 St. Mungo-Notman Asst.

*Pathological Histology* [Lectr.]

Strachan, A. S., M.A., B.Sc., M.B.

*Pharmacy*

[Lectr.  
 Middleton, J. C., M.A., B.Sc., M.B.]

*Psychological M., v. Insanity**Surgery* [Reg. Prof.]

Macewen, Sir William, C.B., D.Sc.  
 Ox. & Dub., LL.D. Glas. &  
 Liv., M.D., F.R.S.  
 Macewen, J. A. C., B.Sc., M.B.,  
 C.M. Asst.  
 Dunbar, J., M.B. Asst.  
 Robertson, G. M'Gregor, M.B.  
 Asst.

Kennedy, R., M.A., D.Sc., M.D.	Edington, G. H., M.D., D.Sc.
St. Mungo Prof.	Lectr.
Swanson, G. C., M.B.	Patrick, J., M.A., M.B.
St. Mungo Asst.	Lectr.
Battersby, J., F.R.C.S.	Macrae, Farquhar, M.B.
Asst.	Lectr.
	<i>Tuberculosis, Clinical</i>
<i>Surgery, Clinical</i>	Crocket, J., M.D. Edin.
	Lectr.
M'Gregor, A. N., M.D.	Macgregor, A. S. M., M.D.
Lectr.	Lectr.
Kay, T., M.B., C.M.	<i>Venereal Diseases</i>
Lectr.	Watson, D., M.B., C.M.
	Lectr.

## GENERAL INFORMATION (v. also p. 219)

Founded by a Papal Bull in 1451, after the model of Bologna, the Univ. was reconstituted by a Charter of King James VI. of Scotland in 1577. In 1864-70 the old college buildings and site were sold and new buildings were erected in a more suitable position on the crest of a hill (Gilmorehill) to the west of the city. Funds for this were obtained partly from the proceeds of the sale, partly from public subscription, and partly from a Parliamentary grant of £120,000. Queen Margaret College was acquired by gift in 1893 for the use of women students. The Carnegie Trust contributed £60,000 towards the cost of additional buildings which were completed in 1907, and a neighbouring estate was presented by the MacLellan family in 1917.

THE LIBRARY, founded in the 15th century, contains 200,000 vols., including 300 books printed before A.D. 1500, and much other material for research. More than 500 current periodicals are taken in. The HUNTERIAN MUSEUM, founded in 1783, contains important collections of MSS., coins, anatomical preparations, zoological and mineral specimens, etc. Large new departments with spacious LABORATORIES have been erected for Engin., Bot., Nat. Philos., Chem., Physiol., Anat., Path., Mat. Med., Forensic Med., Pub. Health. There are BOTANICAL GARDENS and an OBSERVATORY. As Glasgow stands at the centre of the shipbuilding, engineering, mining, and industrial area of Scotland, it offers unique opportunities for technical training. Three large general Hospls. are available for clinics, besides special institutions (including Consumption Sanatoria).

FACULTIES. Arts, Science, Medicine, Theology, Law. Depts. of Applied Science—Engineering (Civ., Elec., Mech., Mining, Naval Archt.), Applied Chem., Agric., Public Health, Pharmacy.

DEGREES, v. p. 221. Applications by Overseas students for remission of part of the class attendance for B.Sc. in branches other than Engineering will be considered sympathetically. *Diploma* in Education, 1 yr. course, for graduates (the first yr. of the Ed.B. course). *Certificates* of Proficiency in Engineering Science and in Mining Engin., 3 yrs.' courses, of which first yr. may be taken in Roy. Tech. Coll.; no prelim. examn.

The list of extra-academical teachers whose courses in certain subjects are recognized as qualifying *pro tanto* for graduation include several resident outside the United Kingdom, namely in Cape Town (in Nat. Philos., Chem., Bot., Zool.), Grahamstown (Physics, Chem., Bot., Zool.), Johannesburg (Zool. and Chem.), and Stellenbosch (Bot., Chem., Physics).

For detailed information regarding POST-GRADUATE study and research in any Faculty application should be made to the Dean, v. also p. 222. A Post-graduate *Medical Assocn.* organizes demonstrations for Med. Practitioners;

fee for series, Nov. to May, 3 gs.; programme obtainable from the Secy., P.-G. Med. Assocn., The Univ.

CLASS FEES. For LL.B., 40 gs.; B.L., 30 gs.; M.B., Ch.B., about £250 for 5 yrs. Combined M.A. and B.Sc., 112½ gs. V. also p. 222.

SCHOLARSHIPS FOR GRADUATES: about 76 of from £30 to £280 p.a., most of them open only to graduates of Glas. (For undergraduates there are 480, varying in value from £10 to £50 or more p.a., chiefly in the Faculty of Arts, in addition to Bursaries of from £5 to £25, awarded by the Provincial Committee for the training of teachers.) V. also p. 223.

RESIDENCE. Lodgings or board with private families with use of 2 rooms, generally obtainable in neighbourhood of the Univ., for from 35s. to 50s. per week. A few students' hostels or settlements, of limited accommodation, where the charges are lower, are run by private committees or bodies of students and graduates.

ADULT EDUCATION. Free public lectures are delivered during winter on various subjects.

PUBLICATIONS. *Calendar* (July); *Glasgow Univ. Magazine*, weekly during winter session; *Examn. Papers*, Prelim. and Degree, 6d. per set; *Annual Handbook* for matriculated students; *Handbook* for Overseas students and graduates.

## THE YEAR 1921-22

BENEFACTIONS. Wm. J. Millar, £100 for annual prize of books for Civil Engin.; Mary H. and James Thomson, £250 for foundation of prizes for Engin. and Astron., Geog., or Maths; Sir Wm. Lorimer, LL.D., £10,000; students and friends of late Prof. G. G. Ramsay, £300 for Memorial Fund for encouragement of classical study; Colonel Walter Scott, per Burns Club of London, for prize of not less than £10 p.a. for encouragement of study of Lowland Scots.

HONORARY DEGREES CONFERRED. LL.D.—James Andrew, Sir John Harvard Biles, Very Rev. James Cooper, Thomas Jones, Prof. Emile Legouis, Prof. R. A. S. MacAlister, James MacFarlane, J. MacK. McLeod, Louis Raemaekers, Edwin Temple, Eleutherios Venizelos. D.D.—Wm. M. Christie, Donald Fraser, A. C. Hill, J. D. McCallum, Donald McDonald, Right Rev. Bishop E. T. S. Reid, Right Rev. Bishop Wm. Temple, P. D. Thomson.

OTHER DEGREES. M.A.—269; D.Litt.—4; LL.B.—16; B.L.—24; M.D.—17; M.B., Ch.B.—153; B.D.—2; B.Sc.—163; D.Sc.—1.

NUMBER OF STUDENTS preparing for first degree in Arts, 1388, including 682 women; Pure Science, 299 (women, 120); Medicine, 1696 (w., 397); Law, 114 (w., 7); Theol., 29; Engineering, 813; Applied Chem., 204 (w., 0); Agric., 54. Research and Post-graduate, 54 (w., 6). Occasional, 206. Total: full-time, 4633; part-time, 224. Total, 1921-22, 4857.

RESIGNATIONS. Very Rev. James Cooper; J. G. Harrower, apptd. to Chair of Anat. at Singapore; John M. Lothian, apptd. Prof. in Univ. of Saskatchewan; G. Haswell Wilson, apptd. Prof. in Univ. of Birmingham.

# THE ROYAL TECHNICAL COLLEGE, GLASGOW

[Affiliated to the University of Glasgow.]

*Chairman of the Board of Governors*—Sir GEORGE BEILBY, LL.D.,  
D.Sc., F.R.S., F.I.C.

*Director*—H. F. STOCKDALE, LL.D.

## PROFESSORS, LECTURERS, ETC., January 1, 1923.

<i>Architecture and Building</i>		Brown, A. C., A.I.C., A.R.T.C.
Hughes, T. H., A.R.C.A.,		Macaulay, R. M., A.I.C.
A.R.I.B.A.		Crawford, A. B., B.Sc., A.R.T.C.,
Prof. and Dir. of Arch.		A.I.C.
Studies.		Steele, J. K., B.Sc., A.R.T.C.,
Gourlay, C., B.Sc., F.R.I.B.A. Prof.		A.I.C.
Brown, T.	Lectr.	Ferguson, J., B.Sc., A.R.T.C.,
Smith, Wm. J., A.R.I.B.A.		A.I.C.
	Lectr.	Burns, R., A.R.T.C., A.I.C.
<i>Botany and Bacteriology</i>		
Ellis, D., D.Sc. Lond., Ph.D.		
Marb.	Lectr.	
<i>Chemistry, Technical</i>		<i>Chemistry, Organic</i>
Gray, T., D.Sc., Ph.D. Jena, F.I.C.		Wilson, F. J., D.Sc. Edin., Ph.D.
Young Prof. and Dir. of		Leip., F.I.C. Prof.
the Sch. of Chem.		Cumming, W. M., B.Sc., A.I.C.
Cruickshanks, G. S., Ph.D. Leip.,		Lectr.
F.I.C.	Lectr.	Hopper, I. V., B.Sc. Lond.,
Buchanan, Walter J., A.R.T.C.		A.R.C.S.I., F.I.C. Lectr.
	Demr.	
Heriot, T. H. P., F.I.C. (Sugar		
Manuf.)	Lectr.	<i>Dyeing, Bleaching, etc.</i>
		Steven, A. B., B.Sc. Lond., F.I.C.
		Lectr.
<i>Chem., Inorg. and Analyt.</i>		<i>Engineering, Civil</i>
Caven, R. M., D.Sc. Lond., F.I.C.		Moncur, G., B.Sc. Edin., M.I.C.E.,
Prof.		M.Amer.S.C.E. Prof.
Sutherland, Maggie M. J., D.Sc.,		Hunter, W., B.Sc. Lond.,
F.I.C.	Lectr.	A.M.I.C.E., A.R.T.C. Lectr.
Cranston, J. A., D.Sc., A.I.C.		Thomson, G., M.A. Edin., M.I.C.E.
(Physical Chem.)	Lectr.	(San. Eng.) Lectr.
Duncan, J. G., F.I.C., A.R.T.C.		
	Lectr.	<i>Engineering, Electrical</i>
Gordon, P. F., A.I.C.	Lectr.	Maclean, M., M.A., D.Sc., LL.D.,
Demrs. :		M.I.C.E., M.I.E.E. Prof.
Pickering, E. C., B.Sc. Lond.,		MacKellar, D. J., B.Sc., A.R.T.C.,
A.I.C.		A.M.I.E.E. Lectr.
		Asst. Lectrs. and Demrs. :
		Murray, J., B.Sc.

Farrell, J. F. E., B.Sc., A.M.I.Mech.E.	<i>Geology, Economic</i>
Shearer, G., B.Sc.	Edwards, E. J., M.Sc. Manc. and Leeds, F.R.G.S. Lectr.
Sharp, H. S. N.	

*Engineering, Mechanics*

Longbottom, J. G., A.R.C.S., M.I.Mech.E. Prof.	<i>Mathematics</i>
Blackadder, W., B.Sc. Edin., A.M.I.C.E. Lectr.	Miller, J., M.A., D.Sc. Prof.
Blacklock, W., B.Sc. Lond. Lectr.	Paul, J., M.A., B.Sc. Lectr.
Grassie, J. C., B.Sc. Demr.	Heddle, Eric W. M., M.A., B.Sc. Lectr.
Ramsay, J., A.M.I.C.E. Demr.	
Gnodde, E. P. D., B.Sc. Demr.	<i>Metallurgy</i>

*Engineering, Mechanical*

Mellanby, A. L., D.Sc. Durh., M.Sc. McG., M.I.Mech.E. Prof.	<i>Metallurgical Chemistry</i>
Sinclair, J. H., M.Sc. Vict., B.Eng. Liv. Lectr.	Hay, R., B.Sc., A.I.C. Lectr.
Kerr, Wm., A.R.T.C. Lectr.	<i>Natural Philosophy</i>
Smith, J., B.Sc., A.M.I.Mech.E. Lectr.	Muir, J., D.Sc., M.A. Camb. Freeland Prof.
	Rankin, J. S., B.Sc., A.R.T.C. Lectr.
	Morton, E., A.R.C.S.I., A.I.C. Lectr.

## Asst. Lectrs. and Demrs. :

Caldwell, P. S., A.R.T.C., A.M.I.Mech.E.	Cameron, Jessie G., M.A., B.Sc. Lectr.
Ferguson, W.	M'Kerracher, D., B.Sc., A.R.T.C. Demr.
Milnes, W. A.	Symon, F. J., B.Sc. Demr.
Sneeden, O., B.Sc.	
Garrick, J. A., B.Sc.	<i>Naval Architecture</i>
Orkney, J. C., B.Sc.	Gray, W. M., B.Sc., M.I.N.A. Lectr.
Anderson, D. S., B.Sc., A.R.T.C.	<i>Pharmacy and Mat. Med.</i>
	Todd, J. P., Ph.C. Lectr.

*Engineering, Mining*

Burns, D., M.I.M.E. Prof.	<i>Sugar Manufacture, v. Chem.</i>
Stevenson, J. Lectr.	<i>Textile Manufacture</i>
Miller, Wm. Demr.	Watson, W. Lectr.
Hutchison, J., B.Sc. Demr.	Stanworth, T. D. Asst.

## GENERAL INFORMATION

Anderson's College, founded in 1796, the College of Science and Arts (1823, the first "Mechanics' Institution"), and the Atkinson Institution (1861), were amalgamated in 1886 under the title of the Glasgow and West of Scotland Technical College, which was changed in Feb. 1912 to the Royal Technical College. The College was affiliated to the Univ. of Glasgow in March 1913.

The College building, comprising over 7 acres of floor space, cost, with equipment, £400,000. Qualifying courses are provided in the subjects named above for Degrees of the Univ. in Applied Science and for the Diploma of the College. Courses in the following qualify for the Diploma only: Archit. and Building, Naval Archit., Textile Manuf. There are also Departments of Navign.

and Bakery, as well as numerous evening classes in other subjects, mainly technological. The courses for the Diploma cover 3 (in Chem. and Metall., 4) yrs. ; for the Associateship in any of the Diploma subjects, attendance during 4 yrs. is required. The evening lecturers are not included in the above lists ; some of their work is, however, of university and even post-graduate standard. Much research work, for the prosecution of which a development fund of over £60,000 has been raised, is carried on at the College.

The Glasgow School of Architecture is maintained by the College and the Glasgow School of Art working in co-operation through a Joint Committee under whose authority its Diplomas (5 yrs' course) are issued.

FEES for tuition : 25 gs. and 30 gs. p.a.

## THE YEAR 1921-22

NUMBER OF STUDENTS. Graduating and Diploma students in Applied Science admitted for the first time, 213 men and 23 women. Total full-time Research, Graduating, and Diploma students, 678 men and 29 women. Part-time students, Degree 51 men, Diploma 67 men. Part-time students attending classes of Degree or Diploma standard, 2435 men and 73 women, of whom 71 were graduates of 8 different Univs. Other part-time students, 1839. Totals, full-time, 707 ; part-time, 4465. 69 day students were from abroad : India, 22 ; South Africa, 8 ; Norway, 8 ; China, 6 ; Egypt, 3 ; Greece, 3 ; British West Indies, 2 ; Denmark, 2 ; U.S.A., 2 ; Portugal, 2 ; other countries, 11. Of the evening students 2651 were not less than 21 yrs. of age.

DEGREES obtained, 63. College diplomas, 66.

# UNIVERSITY OF ST. ANDREWS

CHANCELLOR AND PRESIDENT OF THE GENERAL COUNCIL—The  
Rt. Hon. EARL HAIG OF BEMERSYDE, O.M., K.T., G.C.B., etc.

VICE-CHANCELLOR AND PRINCIPAL OF THE UNIVERSITY AND OF THE  
UNITED COLLEGE—JAMES COLQUHOUN IRVINE, C.B.E., Ph.D.,  
D.Sc., LL.D. Glas., F.R.S.

RECTOR AND PRESIDENT OF THE UNIVERSITY COURT—RUDYARD  
KIPLING, LL.D., D.Litt.

SECRETARY AND REGISTRAR—ANDREW BENNETT.

LIBRARIAN—J. M. ANDERSON, LL.D.

PRINCIPAL OF ST. MARY'S COLLEGE—Very Rev. G. GALLOWAY, M.A.,  
D.Phil., D.D.

PRINCIPAL OF UNIVERSITY COLLEGE, DUNDEE—J. Y. MACKAY, M.D.,  
LL.D.

ADVISERS OF STUDENTS AT ST. ANDREWS: IN ARTS—Prof. WEBSTER;  
IN SCIENCE—Prof. HERRING; IN MEDICINE—Prof. WATERSTON.

AT DUNDEE: IN ARTS AND SCIENCE—Prof. STEGGALL; IN MEDICINE  
—Prof. CHARTERIS.

## UNIVERSITY COURT

PRESIDENT—THE RECTOR.

THE PRINCIPAL, *ex officio*.

THE PRINCIPALS OF ST. MARY'S  
COLLEGE and UNIVERSITY  
COLLEGE, DUNDEE, *ex officio*.

THE PROVOST OF ST. ANDREWS  
and THE LORD PROVOST OF  
DUNDEE, *ex officio*.

JAMES YOUNGER, LL.D.

WILLIAM LOW, O.B.E., LL.D.

A. MACGILLIVRAY, C.M., M.D.,  
D.Sc.

J. M. DAWSON, M.A.

JAMES THOMSON, M.A., LL.B.

JAMES CUNNINGHAM, M.A., LL.D.

Prof. BURNET.

Prof. STEGGALL.

Prof. KAY.

SECY.—ANDREW BENNETT.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

*Anatomy*  
Waterston, D., M.A., M.D., C.M.  
Edin. Bute Prof.  
Mackay, J. Y., M.D. Edin., LL.D.  
Prof.\*  
Dow, D. R., M.B., Ch.B. (Regional  
A.) Lectr. & Asst.

Taylor, John, M.D., Ch.M.  
Lectr. & Asst.\*  
Thomson, Christina J., M.B.,  
Ch.B. Asst.\*  
Skæe, F. M. T., M.D., C.M. Asst.\*  
Ferguson, J., M.B., Ch.B. Asst.\*  
*Archæology*, v. History

\* At Dundee.



*Biology, v. Nat. Hist.**Botany*

.....	Prof.*
West, G.	Lectr.*
Robertson, R. A., M.A., B.Sc.	
	Reader.
Kirton, Joanna B., B.Sc.	Asst.

*Chemistry*

Robinson, R., D.Sc., F.R.S.	Prof.
Macbeth, A. K., D.Sc. Belf., M.A.	
	Lectr.
Steele, Ettie S., M.A., B.Sc., Ph.D.	
	Lectr. & Asst.
M'Kenzie, Alex., M.A., D.Sc.,	
Ph.D. Berl., F.R.S.	Prof.*
Boyle, J. S. W., M.A., B.Sc., Ph.D.	
	Lectr. & Asst.*
Hynd, Alex., M.A., D.Sc. (Clinical	
C.)	Lectr.
Hirst, E. L., M.A., B.Sc., Ph.D.	
	Asst.
Walker, Nellie, B.Sc., M.A., Ph.D.	
	Lectr. & Asst.*
Macdougall, Eliz., B.Sc.	Asst.*

*Classics*

Burnet, J., M.A. Ox., LL.D. Edin.,	
Ph.D., F.B.A. (Greek)	Prof.
Lorimer, W. L., M.A. (Greek)	
	Lectr. & Asst.
Dall, Mrs. A., M.A., Ph.D.	Asst.
Lindsay, W. M., M.A. Ox., LL.D.,	
Litt.D., Ph.D., F.B.A. (Hu-	
manity)	Prof.
Thomson, H. J., M.A., D.Litt.	
(Latin)	Lectr. & Asst.
Mills, T. R., M.A. (Latin)	Lectr.*

*Divinity*

Galloway, G., M.A., D.Phil., D.D.	
Edin.	Primarius Prof.
Duncan, G. S., O.B.E., M.A., B.D.,	
B.A. (Bibl. Crit.)	Prof.
Baxter, H. J., M.A., B.D. (Ch.	
Hist.)	Prof.

*Education*

.....	Prof.†
Rusk, R. R., M.A., Ph.D.	Lectr.†

*Engineering, Civ. and Mech., and Drawing*

Fulton, A. R., D.Sc.	Prof.*
Walker, W. J., B.Sc., Ph.D.	
	Lectr. & Asst.*
Whyte, F., B.Sc., A.M.I.C.E.	
	Lectr. & Asst.*

*English Lang. and Lit.*

Webster, A. B., M.A.	
	Berry Prof. of E. Lit.
Peterson, W. G., M.A.	
	Lectr. & Asst.
Soutar, G., M.A., D.Litt.	Lectr.*
Wright, Miss S. L. P.	Asst.
Graham, Margaret, M.A. Glas.	
	Asst.*

*French Lang. and Lit. and Rom. Philol.*

Lewis, C. B., B.A., L. ès L., Ph.D.	
	Lectr.†
Tanqueray, F. J., L. ès L., B.Sc.,	
D.Litt., O.A.	Lectr.†
Aubry, Alice, L. ès L.	Asst.

*Geology*

Innes, D. E. I., M.A.	Lectr.†
Kirk, S. R., B.Sc.	Asst.

*German and Teut. Philol.*

Smith, Muriel, M.A.	Lectr.
Hayens, K., M.A., D.Litt.	Lectr.*

*Hebrew and Oriental Langs.*

Kay, D. M., D.D. Edin., M.A.,	
B.Sc.	Prof.
.....	Asst.

*History, Ancient, and Archæol.*

Burnet, Professor	Lectr.
-------------------	--------

*History, Mediæval*

[Lectr.†	
Williams, J. W., M.A., B.Litt. Ox.	

*History, Modern*

Mackie, J. D., M.A.	Lectr.†
Dickinson, W. C., M.A.	Asst.

*Law, Scots*

[Lectr.*	
Allison, J., C.B.E., M.A., LL.B.	

\* At Dundee.

† At St. Andrews and Dundee.

- Logic and Metaphysics*  
 Stout, G. F., M.A. Camb., LL.D., F.B.A. Prof.
- Logic and Psychology*  
 Morrison, D., M.A. Lectr.†  
 Wright, J. N. Asst.†
- Mathematics and Applied Maths.*  
 Turnbull, H. W., M.A. Reg. Prof.  
 Steggall, J. E. A., M.A. Camb. Prof.\*
- Saddler, W., B.A. Camb., M.A. Lectr. & Asst.  
 Butchart, R. K., B.Sc., Ph.D. Lectr. & Asst.\*
- Black, C., M.A. Asst.\*  
 Williamson, J., M.A. Asst.
- Medicine and Surgery, v. infra*
- Natural History*  
 Thompson, D'A. W., C.B., M.A., D.Litt., F.R.S. Prof.  
 Gemmill, J. F., M.A., D.Sc., M.D. Glas. Prof.\*  
 Sutherland, Christina, M.A., B.Sc. Asst.\*  
 Burt, D. R. R., D.Sc. Asst.
- Philosophy, Moral, v. also Logic*  
 Taylor, A. E., M.A. Ox., D.Litt., F.B.A. Prof.  
 ..... Asst.
- Philosophy, Natural*  
 Allen, H. Stanley, M.A., D.Sc. Prof.  
 Bagot, J. C. Lectr. & Asst.  
 Robson, W. G., A.R.C.S., Lectr.  
 Osgood, T. H., M.A. Asst.
- Physics*  
 Peddie, W., D.Sc. Edin. Harris Prof.\*  
 Forrest, J., M.A., B.Sc. Lectr. & Asst.\*  
 Malcolm, Ada, B.Sc. Asst.\*  
 Smith, Winifred J., B.Sc. Asst.\*
- Physiology*  
 Herring, P. T., M.D. Edin. Chandos Prof.
- Reid, E. W., B.A., M.B., Sc.D. Camb., F.R.S. Prof.\*  
 Stiven, D., B.Sc. Asst.\*
- Political Economy*  
 Morrison, C., M.A., LL.B. Lectr.
- Psychology, v. Logic*
- Pub. Health, v. Med.—Fevers*
- Theology, v. Divinity*
- Zoology, v. Nat. Hist.*
- Medicine (for subjects of first 2 yrs.—Anat., etc., v. *supra*)*
- Anæsthetics*  
 Mills, Arthur, M.D. Lectr.\*  
 3 Instrs.
- Bacteriology*  
 Tulloch, W. J., O.B.E., M.D., D.P.H. Prof.\*  
 ..... Lectr.  
 Ross, G. R., M.B., Ch.B. Asst.\*  
 Cumming, W. M., M.B., Ch.B. Asst.\*
- Diseases of Children*  
 Rogers, J. S. Y., M.B., C.M. Lectr.\*  
 Price, Prof. Ll. T. Lectr.\*
- Diseases, Mental*  
 Mackenzie, W. T., M.D. Lectr.\*
- Diseases, Throat, Nose, and Ear*  
 Mathers, R. P., M.D. Lectr.\*  
 Morgan, J. M'L., M.B., Ch.B. Clin. Tutor.
- Diseases, Skin*  
 Milne, F. M., M.A., B.Sc., M.B., Ch.B. Lectr.\*
- Fevers and Pub. Health*  
 Burgess, W. L., M.B., Ch.B., M.D., D.P.H., D.T.M. and H. Lectr.
- Forensic Medicine*  
 Lennox, D., M.D. Lectr.\*

\* At Dundee.

† At St. Andrews and Dundee.

*Materia Medica*

Charteris, F. J., M.D. Glas. Prof.\*  
 Buchanan, W. E. A., M.B., Ch.B. Asst.\*

*Medicine*

Stalker, A. M., M.A., C.M., M.D. Edin. Prof.\*  
 Stalker, J. M., M.B., Ch.B. Asst.\*

*Medicine, Clinical\**

Profs. Charteris and Stalker, Drs.  
 Foggie, and Kerr (Lectrs.),  
 Drs. Stalker, Malcolm, Scott,  
 and Rankine (Tutors).

*Midwifery*

Kynoch, J. A. C., M.B., C.M. Edin. Prof.\*  
 Fairlie, Margaret, M.B., Ch.B. Asst. & Tutor.

*Midw. and Gynæc.*

Buist, R. C., M.A., M.D. Lectr.\*

*Ophthalmology*

M'Gillivray, A., C.M., M.D. Aberd., D.Sc. Reader.\*  
 M'Gillivray, Allister M., M.B., Ch.B. Clin. Tutor & Asst.\*

*Pathology*

Sutherland, L. R., M.B., C.M. Glas. Prof.\*  
 Tudhope, G. R., M.B., Ch.B., D.P.H. Asst. & Lectr.\*

*Pathology, Clinical*

Milne, F. M., M.A., B.Sc., M.B., Ch.B. Lectr.\*

*Surgery*

Price, L. T., M.B., C.M. Prof.\*  
 Brown, F. R., M.B., Ch.B., F.R.C.S. Edin. (Tutor in Clinical S.) Asst.\*

*Surgery, Clinical*

Anderson, J., M.B., Ch.B., F.R.C.S. Edin. Lectr.\*  
 Alexander, R. C., M.A., M.B., F.R.C.S. Edin. Lectr.\*  
 Taylor, John, M.D., Ch.M. Tutor.\*

*Vaccination*

[Lectr.\*  
 Scott, Douglas, M.B., Ch.B.

\* At Dundee.

## GENERAL INFORMATION (v. also p. 219)

The University was founded in 1411. In 1747 St. Salvator's (1450) and St. Leonard's (1512) Colleges were united under the name, "United College of St. Salvator and St. Leonard." St. Mary's College (1537) has, since 1579, been restricted to the teaching of Theology. University College, Dundee (1880), was affiliated to and made to form part of the University in 1897.

**LIBRARY:** 160,000 printed vols. (some of 15th and 16th centuries). MSS. include fine Persian specimens and large folio Antiphonarium. College Library at Dundee. **MUSEUMS** at St. Andrews—Anat., Anthropol., Ethnol., Geol., Mineral., Nat. Hist.; at Dundee—Geol., Med., Nat. Hist. **LABORATORIES** at St. Andrews—in all above depts. except Med., also Chem. (with special Research lab.), Marine, Physics, Physiol., Bot. Garden. At Dundee—Anat., Bact., Chem., Embryol., Engin. (Elec., Hydraulic, Mech.), Mat. Med., Maths., Nat. Hist., Physics, Physiol.

**DEGREES, ETC., v. p. 221.** Courses for graduation in Arts and Science are given both in the United Coll., St. And., and in Univ. Coll., Dundee, some being given in both places, some—Greek, Hebrew, Hist., Moral Philos., Pol. Econ.—only in St. And., some—Engineering—only in Dundee. Medical studies after the first two yrs. are taken solely in Dundee, where facilities for

clinical instruction are available. Here also is provided a course in Scots Law. Associated with the Univ. is the Dundee School of Social Study and Training.

The M.A. Course includes a General and a Special examn. The former, which must be completed before proceeding to the Special, embraces at least 5 subjects, of which Logic must be one, at least two must be Linguistic, and at least one Scientific. Languages must include either (a) Latin or Greek, or (b) French and German. *Foreign students* may count English as a language subject. The Science may be either (1) Maths., or (2) Nat. Philos., or (3) Chem. Either (a) or (1) must be taken by every candidate. In the Special examn. two cognate subjects must be taken, the whole examn. being passed at one time.

The B.Sc. in Pure Science Ordinary degree involves a 3 yrs.' course, embracing at least 4 subjects with a 1st examn. (4 subjects) and a 2nd (2 subjects); the Honours degree involves a 4 yrs.' course (the last year being devoted exclusively to advanced study in the Hons. subject) with 2 examns.—a 1st in 4 subjects and an Honours in one.

*Diplomas*: Education, for graduates who complete the first year of the Ed.B. course; D.P.H., 9 months; L.D.S., 4 yrs.; L.L.A. (for women), attendance on courses not required, standard about the same as that of the ordinary M.A.; Social Study, 2 yrs. after obtaining M.A. or B.Sc. *Certificate* in Social Study for non-graduates over 21 with good general educn., 2 yrs.

**FEES** for Tuition (v. also p. 222). B.Sc., £80; B.Sc. Hons., 90 gs.; M.B., Ch.B., £182. Combined Courses: M.A. and B.Sc., 112½ gs.; M.A. and M.B., Ch.B., £208; M.A., B.Sc. and M.B., Ch.B., £236; B.Sc. and M.B., Ch.B., £220. The above do not include fees for hospl. ticket or cases of labour, or laboratory fees for use of apparatus, etc. Maximum fee for Research students, 5 gs. a term. Degree fees for M.D. or Ch.M., 15 gs.; D.Litt., D.Sc., Ph.D., L.D.S., or D.P.H., 10 gs. Dipl. or Certif. in Social Study, 4 gs.

**RESIDENCE.** University Hall for Women (Warden) at St. Andrews, £66 and upwards p.a., exclusive of tuition fees. Hostel for women students, Dundee (Warden), £40 p.a. Chattran House for men (Warden) at St. Andrews, £60 p.a. and upwards, exclusive of tuition fees.

**SCHOLARSHIPS FOR GRADUATES**: 20, annual value about £1200; v. also p. 223.

**PUBLICATIONS.** *Calendar* (June), 3s. 6d.; U. Coll., Dundee, *Calendar*, 6d.; Students' Repve. Council's *College Echoes* (St. And.) and *The College* (Dundee).

## THE YEAR 1921-22

**BENEFACTION.** Bequest, James Murray, Perth, £600 for entrance Bursary.

**NEW BUILDINGS, ETC.** Accommodation for 6 men students added to Hostel. Reconstruction of Chapel and erection of War Memorial completed.

**NEW DEPARTMENTS AND POSTS.** Lect'ship in Educn. (instead of Chair); addl. Lect'ship in Engin.; Tutors in Diseases of Throat, etc., and in Ophth.; Instrs. in Anæsthetics; Assts. in Nat. Phil., Math., Bact., Elec. Engin.

**NEW ORDINANCES, ETC.** Enabling Lectrs. to be elected to Faculties; recognizing Arabic in Genl. M.A. examn.

**NUMBER OF STUDENTS.** Full-time preparing for first degree, 736 (including 287 women); post-graduate, including research, 49 (19 women); occasional, 59 (18 women). Total, 844 (324 women); in two preceding years, 797, 858.

DEATHS. Prof. J. Edgar (Education), May 1922 ; A. B. Hughes, Instr. in Physical Training, Jan. 1922.

RESIGNATIONS AND RETIREMENTS. A. S. Butler, Prof. of Nat. Phil., retired, succeeded by H. S. Allen, Edinburgh ; A. Main, Prof. of Eccl. Hist., transferred to same Chair in Glasgow ; J. Mackie Whyte, Lectr. in Clin. Med. ; A. C. Bond, Lectr. (Engl.) ; F. G. Macnoughten (Bact.). Assts., etc. : W. G. Robertson, R. S. Paton, W. N. Elgood, L. K. Martin, Mlle. M. de Villèle.

# THE QUEEN'S UNIVERSITY OF BELFAST

VISITOR—H.M. THE KING.

CHANCELLOR—Rt. Hon. THE EARL OF SHAFTESBURY, K.C.V.O., K.P.,  
LL.D.

PRO-CHANCELLORS—Sir HIRAM SHAW WILKINSON, LL.D., D.L.;  
Prof. Sir SAMUEL DILL, M.A., Litt.D., Hon. LL.D.; Rt. Hon.  
HUGH O'NEILL, M.P.

PRESIDENT AND VICE-CHANCELLOR—Rt. Hon. and Rev. THOMAS  
HAMILTON, M.A., D.D., LL.D.

REPRESENTATIVE IN THE PARLIAMENT OF THE UNITED KINGDOM  
—Sir WM. WHITLA, M.A., M.D., LL.D.; IN THE PARLIAMENT  
OF NORTHERN IRELAND—J. CAMPBELL, M.A., M.D., LL.D.,  
F.R.C.S. Edin.; J. H. ROBB, B.A., K.C.; Prof. R. J. JOHNSTONE,  
B.A., M.B., F.R.C.S. Eng.; H. S. MORRISON, M.D.

REGISTRAR—Prof. T. SINCLAIR, C.B., M.D., M.Ch., F.R.C.S.E.

SECRETARY—J. M. FINNEGAN, B.A., B.Sc.

SECRETARY OF ACADEMIC COUNCIL—Prof. R. M. HENRY, M.A.

BURSAR—JOHN GREEN, C.A.

LIBRARIAN—Prof. G. GREGORY SMITH, M.A., LL.D.

CHAIRMAN OF CONVOCATION—JOHN CAMPBELL, M.A., LL.D., M.D.,  
F.R.C.S.E.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Agriculture</i>		<i>Archæology</i>	
8 Extra-Mural Lecturers.		.....	Lectr.
<i>Agricultural Chemistry</i>		<i>Bio-Chemistry</i>	
Robertson, G. S., D.Sc.	Durh.,	Milroy, J. A., M.A., M.D.	Edin.
F.C.S.	Lectr.		Lectr.
<i>Anatomy</i>		<i>Botany</i>	
Walmsley, T., M.D.	Glas. Prof.	Small, J., D.Sc.	Lond. Prof.
Baker, A. H., M.B.	Asst.	Martin, Sarah H., B.Sc.	Demr.
Dodds, R. L., M.B.	Asst.	Lynn, Mary J., M.Sc.	Demr.
M'Laughlin, F. A., M.B.	Asst.	<i>Celtic</i>	
Hunter, R. H., M.B.		O'Connell, F. W., M.A., Litt.D.,	
	Demr. (Embryology).	B.D. Dub., M.R.A.S.	Lectr.
<i>Anatomy, Applied</i>		<i>Chemistry</i>	
Crymble, P. T., M.B., F.R.C.S.		Stewart, A. W., M.A., D.Sc.	Glas.
Eng.	Lectr.		Prof.

M Clelland, E. W., B.Sc.	Asst.	Simms, Florence, M.A.	Asst.
Marsh, J. K., M.Sc.	Asst.	Dorward, Jas., B.Sc.	Asst.
Jackson, Jane H., M.Sc.	Asst.	M'Caughy, E. E., B.A.	Asst.
<i>Chemistry, Applied *</i>		Brown, E. M., M.A.	Asst.
<i>Chemistry, Organic</i>		<i>Engineering, Civil</i>	
Graham, Hugh, M.Sc.	Lectr.	Hummel, F. H., M.Sc.	Birm., A.M.I.C.E. Prof.
<i>Classics</i>		White, G., B.Sc.	Asst.
Dill, Sir Samuel, M.A., Hon.		Finnan, E., M.Sc.	Asst.
Litt.D., Hon. LL.D. Ox.		<i>Engineering, Elec. and Mech.*</i>	
(Greek) Prof.		<i>English Language</i>	
Richardson, L. J. D., M.A.	Asst.	Belfour, A. O., M.A. Ox.	Lectr.
Henry, R. M., M.A. (Latin)	Prof.	<i>English Literature</i>	
Wilkins, M., M.A. Dub. (Latin)	Asst.	Smith, G. Gregory, M.A., LL.D.	Ox. and Edin. Prof.
<i>Commerce</i>		Semple, W. H., B.A.	Asst.
Meredith, H. O., O.B.E., M.A.		<i>French</i>	
Camb., M.Com. Manc.		Savory, D. L., M.A. Ox.	Prof.
Dean of the Faculty,		Mossé, Jean	Asst.
Lectr. in C., and Prof.		Moorhead, Margt. D., B.A.	Asst.
of Economics.		<i>Geology and Geography</i>	
Recognized Teachers in the		Charlesworth, J. K., D.Sc.	Leeds, Ph.D. Bres. Prof.
Munic. Coll. of Tech. :		<i>Geology</i>	[Asst.
Dodd, F. T. Lloyd, M.A., D.Sc.		Reynolds, Doris, B.Sc. Lond.	
Prof.		<i>German</i>	
Boyd, D. T., B.Com.Sc. (Account-		Williams, R. A., Ph.D.	Leip., D.Litt. Dub. Prof.
ing).		<i>History, Modern</i>	[Prof.
M'Cracken, W. J., B.A., B.L.		Todd, J. E., M.A. Ox. and Edin.	
(Coml. Law).		Hughes, E., M.A.	Asst.
Dunne, T. (Econ., Geog., and		<i>History, Economic</i>	
Business Methods).		Lemberger, J., M.A. Ox.	Lectr.
Fleet, H. (French).		<i>Law, English</i>	
Sueyras, M. (Spanish).		Baxter, J. S., LL.D. Dub.	Prof.
Carson, J. H. A. (Maths.).		<i>Law, Jurispr. and Roman</i>	
<i>Dental Science</i>		Strahan, J. A., M.A., LL.B.	Prof.
Hunter, W. M., L.D.S. Edin. (Mat.		<i>Logic and Metaphysics</i>	[Prof.
Med.) Lectr.		Laird, J., M.A. Camb. and Edin.	
Elwood, H., L.D.S. Edin. and		<i>Mathematics</i>	
Penn. (Mechanics) Lectr.		Dixon, A. C., M.A., Sc.D. Camb.	
Swan, H. M., L.D.S., R.C.S. Eng.		and Lond., F.R.S.	Prof.
(Surgery) Lectr.		Geale, Eliza A., B.A.	Asst.
M'Keag, H. T. A., B.D.S. Dub.			
(Orthod.) Lectr.			
<i>Economics, v. Comm., Hist.</i>			
<i>Education</i>	[Prof.		
M'Callister, W. J., M.A., B.Sc.			

\* V. *infra* Recognized Colls.

*Music*

Valker, L., B.A., Mus.D. Lectr.

*Philosophy, Moral, and History of Philos.*

Dorward, A. J., M.A. Camb. Lectr.

*Philosophy, Scholastic*

O'Keeffe, D., M.A. Lectr.

*Physics*

Morton, W. B., M.A. Camb. Prof.

..... Lectr.

Wylie, J., B.A. Lectr.

Woods, Amy I., M.A., M.Sc. Demr.

*Physiology*

[Prof. Milroy, T. H., M.D., B.Sc. Edin.]

Andrews, L., M.B. Demr.

M'Afee, G. H. G., M.B. Demr.

*Spanish*

Llubera, J. G., D.Litt. Mad. Lectr.

*Technology, v. infra**Zoology*

[Prof. Wilson, G., O.B.E., M.A., D.Sc. Edin., Ph.D. Freib., M.R.I.A.]

Riddell, W., M.A. Demr.

*Medicine (for subjects of first 2 yrs.—Anat. etc., v. supra)**Gynæcology*

Johnstone, R. J., B.A., M.B., F.R.C.S. Eng. Prof.

Greer, H. L. H., M.B. Asst.

*Hygiene, v. also Pub. Health*

Wilson, W. J., B.A., M.D., D.Sc., D.P.H. Prof.

Blair, E. M., M.Sc. Demr.

Totton, J. H., B.A., B.Sc. Demr.

*Materia Med. and Pharmacology*

M'Ilwaine, J. E., M.D. Prof.

Picken, S. B., M.B. Asst.

*Mat. Med. and Pharmacy*

[Demr. Fielden, V. G. L., M.D., Ph.C.]

*Medicine*

Lindsay, J. A., M.A., M.D., F.R.C.P. Lond. Prof.

Turkington, S. I., M.D., D.P.H. Asst.

*Medical Jurisprudence*

The Prof. of Pathology Lectr.

Houston, T., M.D., B.A. Lectr.

*Midwifery and Infantile Diseases,*

v. also Vacc. [Prof.]

Lowry, C. G., M.D., F.R.C.S.I.

*Ophthalm. and Otology*

[Lectr. Craig, J. A., M.B., F.R.C.S. Eng.]

*Pathology*

Symmers, W. St. C., M.B. Prof.

Lee, J. S. J., M.B., D.P.H. Demr.

*Pathology, Clinical*

Houston, T., B.A., M.D. Demr.

*Public Health*

[Lectr. Bailie, H. W., L.R.C.P. and S. Edin., L.F.P.S. Glas., D.P.H.]

*Surgery*

Sinclair, T., C.B., M.D., M.Ch., F.R.C.S. Eng. Prof.

Malcolm, H. P., M.B. Asst.

*Vaccination*

M'Liesh, J., M.B., D.P.H. (Asst. in Midw.) Teacher.

*University Clinical Lecturers :*

McKisack, H. L., M.D., F.R.C.P. (Med.).

McLorinan, W., L.R.C.P. &amp; S. (Med.).

Kirk, T. S., M.B., B.A. (Surg.).

O'Doherty, J., F.R.C.S.I. (Surg.).

Dempsey, A. J., M.B. (Midw.).

Hanna, H., M.B., M.A., B.Sc. (Ophth. &amp; Ot.).

McCready, W., M.B., F.R.C.S.I. (Ophth. &amp; Ot.).

*Technology (v. also Agr. and Engin.)*

Extra-Mural Staff (Hon.), being

Profs. and Lectrs. at the

Munic. Coll. of Tech.

*Architecture*

Beaumont, I., A.R.C.A. Lond., F.R.S.A. Prof.

*Building Construction*

Hampshire, T. R. Lectr.



<i>Chemical Technology</i>		<i>Mathematics</i>	
Iren, H., M.A., D.Sc., Ph.D.	Prof.	Earle, J., B.A.	Prof.
ill, C. J., M.Sc., A.I.C.	Lectr.	Murphy, J. J. F., B.Sc. Lond.	
ughes, Miss K. H., B.A.	Lectr.		Lectr.
hompson, J. R., M.Sc.	Lectr.	<i>Mechanical Engineering</i>	
<i>Electrical Engineering and Physics</i>		Smith, J. H., D.Sc., A.R.C.Sc.	Prof.
atthewman, T. H., M.A., M.I.E.E.	Prof.	Warnock, F. V., B.Sc., A.R.C.Sc.	Lectr.
iscoat, C., A.R.C.Sc.I.	Lectr.	Fforde, W. J. (Design)	Lectr.
'Kenna, O., M.A., B.Sc.	Lectr.	Sandham, B., B.E. (Nav. Archit.)	Lectr.
<i>Electro-Technics</i>		<i>Textile Industries</i>	
tanley, Rupert, B.A., M.I.E.E. (Principal)	Prof.	Bradbury, F.	Prof.

## RECOGNIZED COLLEGES AND TEACHERS

MUNICIPAL COLLEGE OF TECHNOLOGY, BELFAST, v. *supra*—Commerce and Tech.

ROYAL COLLEGE OF SCIENCE, DUBLIN, providing instruction for the 3rd and 4th yrs. of the B.Sc. (Agr.) courses, v. p. 278.

## GENERAL INFORMATION

Queen's College, incorporated in 1849, was dissolved in 1909 on the constitution of the Queen's University of Belfast.

LIBRARY, 90,000 vols. MUSEUMS: Class. Archæol., Nat. Hist., Medical,ateria Medica, Sanitary Science. LABORATORIES: Chemistry ("Donald urrie"), Engineering ("Harland"), Physiology ("Jaffé"), Pathology and acteriology ("Musgrave"), Physics, Anat., Bot., Geol., Pharm., Zool. ospitals available for Clinics, 3 general, 10 special (Fever, Maternity, Women, ildren, Ophth., Eye, Ear and Throat, Consumption, Lunacy, Skin).

FACULTIES. Arts (including Music), Science (including Agric. and Civil ngin.), Law, Medicine, Commerce, Applied Science and Technology, Dept. Dental Science.

DEGREE COURSES. 3 yrs.—B.A., B.Sc., B.Sc. in Engin. or Textile Tech., L.B., B.Com.Sc.; 4 yrs.—B.Sc. in Agric.; 5 yrs. (of which 2 may be in other proved Univs. or Med. Schools)—M.B., Ch.B., B.A.O.; 1 yr.—LL.B. course r graduates of this or another Univ.

The courses in Elec. and Mech. Engin. are taken in the Municipal College f Technology; the 3rd and 4th yr. courses for the B.Sc. in Agric. in the R.C.Sc., ublin. 3 yrs.' day or 5 yrs.' evening classes in the M.C.T. qualify for B.Sc. .Tech. 3 yrs.' day or 5 yrs.' evening classes in the M.C.T. qualify for the .Com.Sc.

*Diplomas.* Educn. (1 or 2 yrs.); Higher Dipl. in Educn. (for graduates).

HIGHER DEGREES. The M.A. may be taken by a B.A. 1 yr. after graduation xamn. or thesis or independent research). The (1) D.Lit. and (2) LL.D. e conferred on grads. of this Univ. distinguished in (1) letters, or in literary,

philos., or hist. research, or (2) Law, or in legal or hist. research. The LL.D. may be obtained by thesis also. The M.Sc. is open to a B.Sc. of the Univ. and grads. of other Univs. holding a degree of similar rank after the lapse of not less than 1 yr. from graduation (thesis or independent research). The D.Sc. is open to grads. of this Univ. 3 yrs. after graduation in any faculty. It is conferred for research or scientific work in relation to Science pure or applied, or for distinction in Science, Engin., or other practical application of Science. The M.D., M.Ch., and M.A.O. are open to graduates in Medicine of 3 yrs.' (if also graduates in Arts or Science, 2 yrs.) standing by examn. or thesis. As regards Ph.D. *see* p. 15.

**FEES.** Enrolment (annual), 3 gs. Class fees, annual (inclusive)—Arts Honours School, 11 gs.; Engineering, 21 gs.; B.Com.Sc., 11 gs.; Dipl. Educn. (2 yrs.), 6 gs.

**SCHOLARSHIPS, ETC., FOR GRADUATES** of the Univ. Studentships of £50: 5 in Arts, which may be raised by £25 and continued for a 2nd yr.; 4 in Science. Special grants to Med. graduates for original research or clin. study. Mackay Wilson Travelling Med. Scholp., £100. Musgrave Studentships in Path., Physiol., Physics, Biol., and Chem., of £200 p.a. for research. Four other Studentships of the aggregate annual value of £330.

**RESIDENCE.** Women's Hostel. Board and residence per annum, about £52. Board and lodging obtainable in the town from about 25s. a week upwards.

**RECOGNITION OF OTHER UNIVS.** Students from other approved Univs. may apply for exemption from a year's attendance for first degree, attendance and examn. in some of the subjects for first degrees in Arts and Science, in consideration of equivalent courses and examns. elsewhere.

**PUBLICATION.** *Calendar* (Jan.), 2s.

## THE YEAR 1921-22

**HONORARY DEGREES.** LL.D.—Sir Henry Wilson, Sir James Craig, R. M. Jones, J. Miller, J. Lorrain Smith, Rupert Stanley, Sir Robert Wallace. *D.Lit.*—W. B. Yeats. *D.Sc.*—G. A. J. Cole, J. L. E. Dreyer, R. L. Praeger.

**OTHER DEGREES.** B.A.—29; B.Sc.—68; B.Com.Sc.—9; M.B.—92; LL.B.—12; M.A.—6; M.Sc.—16; M.D.—9; M.Ch.—1; D.P.H.—21; Dip. Ed.—15; Higher Dip. Ed.—5.

**NUMBER OF STUDENTS.** Total regular students, 1068; in Arts, 235; Sc., 189; Applied Sc. and Technology, 57; Med., 510; Law, 31; Commerce, 46.

# UNIVERSITY OF DUBLIN, TRINITY COLLEGE

CHANCELLOR—The EARL OF IVEAGH, K.P., LL.D., F.R.S.

VICE-CHANCELLOR—The Rt. Hon. BARON GLENAVY, LL.D.

VISITORS OF TRINITY COLLEGE—THE CHANCELLOR (or VICE-CHANCELLOR) ; THE LORD CHIEF JUSTICE.

PROVOST—The Rt. Hon. and Most Rev. J. H. BERNARD, D.D.

REPRESENTATIVES IN PARLIAMENT OF IRISH FREE STATE—E. H. ALTON, M.A. ; G. FITZGIBBON, M.A. ; J. CRAIG, M.D. ; W. E. THRIFT, M.A.

## SENIOR FELLOWS OF THE COLLEGE

Gray, T. T., M.A., Vice-Provost.

Cathcart, G. L., M.A., Auditor.

Purser, L. C., M.A., Litt.D., Registrar.

Roberts, W. R. W., D.D., Senr. Lectr.

Culverwell, E. P., M.A., Senr. Dean and Catechist.

O'Sullivan, A. C., M.A., M.D.

Russell, R., M.A., Bursar.

## JUNIOR FELLOWS OF THE COLLEGE

Fry, M. W. J., M.A., Sen.  
Proctor.

†Macran, H. S., M.A.

Gwynn, E. J., M.A.

Thrift, W. E., M.A.

Smyly, J. G., Litt.D.

Mooney, G. W., M.A.

\*†Kennedy, W., M.A.

\*†Rogers, R. A. P., M.A.

\*†Goligher, W. A., M.A., Litt.D.

\*Fraser, J., M.A.

\*†Alton, E. H., M.A.

\*Gwynn, R. M., B.D.

†Webb, G. R., M.A., Junr. Bur-  
sar and Registrar of Chambers

\*Tate, Sir R. W., K.B.E., M.A.,  
Junr. Dean.

\*Thrift, H., M.A.

\*Canning, H., M.A.

\*†Luce, A. A., D.D.

\*Johnston, J., M.A.

\*†Henry, J. M., M.A.

\*Godfrey, F. La T., M.A.

Joly, John, Sc.D.

Rowe, C. H., M.A., Junr. Proctor.

Fearon, W. R., Sc.D.

\* Tutor Fellows.

† Honor. Lecturers for 1922-23.

PUBLIC ORATOR—Sir R. W. TATE, M.A.

LIBRARIAN—J. G. SMYLY, Litt.D.

REGISTRAR—L. C. PURSER, M.A., Litt.D.

## REGISTRARS OF THE PROFESSIONAL SCHOOLS

*Law*—W. A. Goligher, Litt.D.

*Civil Service*—E. H. Alton, M.A.

*Physic*—A. C. O'Sullivan, M.D.

*Education*—R. J. Fynne, M.A.

*Engineering*—W. E. Thrift, M.A.

*Agriculture*—J. Joly, Sc.D.

*Music*—H. S. Macran, M.A.

REGISTRAR OF S. AFRICAN STUDENTS—G. R. WEBB, M.A.

LADY REGISTRAR—OLIVE C. PURSER, M.A.

WARDEN OF TRINITY HALL—ELIZ. M. CUNNINGHAM, M.A.

## PROFESSORS, LECTURERS, ETC., January 1, 1923

<i>Anatomy</i> , v. Zool. and Med. Surg.		<i>Classical Archæol.</i> , v. Hist.	
<i>Anglo-Saxon</i> , v. German		<i>Classical Composition</i> Tate, Sir R. W., M.A.	Lectr.
<i>Arabic, Persian, and Hindustani</i> Haig, Sir T. W., K.C.I.E., C.S.I., C.M.G. (Reader in Ind. Hist.) Prof.		<i>Classics</i> The Tutorial Staff	Lectrs.
<i>Astronomy</i> ..... Astronomer of Ireland Martin, C.	Royal Prof. Asst.	Smyly, J. G., Litt.D. (Greek) Regius Prof. Mooney, G. W., M.A. (Latin)	Prof.
<i>Biblical Greek and Hebrew</i> Gwynn, R. M., B.D.	Prof.	<i>Dental Surg. and Pathol.</i> [Lectr. Baker, A. W. W., M.D., M.Dent.Sc. Friel, E. S., M.Dent.Sc. Lectr. in Orthodontia.	
<i>Botany</i> Dixon, H. H., Sc.D. Ball, N. G., M.A.	Prof. Asst.	<i>Dental Mechanics</i> Cockburn, J., L.D.S.	Lectr.
<i>Celtic Languages</i> Gwynn, E. J., M.A.	Lectr.	<i>Divinity</i> , v. also Bibl. Gk., Hist., Theol. M'Neile, A. H., D.D. Regius Prof. White, N. J. D., D.D. (Lectr. in Hebrew) Abp. King's Prof. Jennings, J. A., M.A.	
<i>Chemistry</i> Young, S., Sc.D. Ramsden, W. C. Bailey, K. C., M.A. (Lectr. in Physics also) Bell, J.	Prof. Asst. Lectr. Demr.	Wallace Lectr. Luce, A. A., D.D. Asst. Forrester, J. C., M.A. Asst.	
<i>Chemistry, Applied</i> Werner, E. A., Sc.D.	Prof.	<i>Education</i> Fynne, R. J., M.A. Dub. and Lond. Prof. Henry, J. M., M.A. Lectr.	

*Engineering, Civil*

Clark, D., B.Sc. Lond.,  
A.M.I.C.E. Prof.  
Jackson, J. T., M.A. Asst.  
Dotter, J. R., M.A. Lectr.

*Engin. Practice, Elec.*

Patlow, W., M.A., B.A.I. Lectr.

*Engineering, Elec. Traction*

Harriiss, G. M. Lectr.

*Engineering, Harbour*

Griffith, Sir J. P., M.A.I.  
Hon. Prof.

*Engineering, Mech.*

Illy, W. E., M.A., M.A.I., Sc.D.  
(Asst. in Civ. E.) Lectr.

*English Literature*

French, W. Fitz J., Litt.D. Prof.

*French, v. also Romance*

The Tutorial Staff Lectrs.

*Geology and Mineralogy*

Doyle, J., M.A., Sc.D. Prof.  
Doole, J. H. J., B.A. (Asst. in  
Physics also) Research Asst.  
Doyle, L. B., Sc.B. (Palæontology)  
Asst. and Lectr.

*German*

[Prof.  
Waterhouse, G., M.A. Camb.,  
Litt.D. (Lectr. in Anglo-Saxon)

*Hebrew, v. also Bibl. Greek, Div.*

Kennedy, W., M.A. Lectr.  
Alton, E. H., M.A. Lectr.

*History, Ancient, and Classical*

*Archæol.* [Prof.  
Poligher, W. A., M.A., Litt.D.  
Johnston, J., M.A. Asst.

*History, Ecclesiastical*

Lawlor, H. J., D.D., Litt.D. (Asst.  
in Div. and Lectr. on Engl.  
Bible) Prof.

*History, Indian, v. Arabic**History, Modern*

Curtis, E., M.A. Ox. (also of Ora-  
tory) Erasmus Smith's Prof.

*Phillips, W. A., M.A. Ox.*

Lecky Prof.  
Maxwell, Constantia E., M.A.  
Lectr.

*Irish*

O'Rahilly, T. F. Prof.

*Italian, v. also Romance*

Tate, Sir R. W., K.B.E., M.A.  
Lectr.

*Law*

Bastable, C. F., LL.D. (also Prof.  
of Pol. Econ.) Reg. Prof.

*Law, Feudal and English*

Baxter, J. S., LL.D. Reg. Prof.

*Law, Const. and Crim., etc.*

Ryan, M. J., LL.B. N.U.I.  
Reid Prof.

*Mathematics*

Rowe, C. H., M.A.  
Acting Erasmus Smith's Prof.  
Rogers, R. A. P., M.A.

Donegal Lectr.  
Broderick, T. S., B.A. Lectr.  
The Tutorial Staff Lectrs.

*Medicine and Surgery, v. infra**Modern East Indian Langs.*

Pope, J. v. S., M.A. Camb. Prof.

*Music*

[Prof.  
Kitson, C. H., M.A. Camb.,  
Mus.D. Ox., F.R.C.O.

*Oratory, v. History*

Curtis, E., M.A. Ox.  
Erasmus Smith's Prof.

*Oriental Langs., v. Arabic,*  
Hebrew, Modern, Sansk.

*Philosophy, Moral*

Macran, H. S., M.A. Prof.

*Mental and Moral Science*

The Tutorial Staff Lectrs.

*Philosophy, Natural*

Fry, M. W. J., M.A. Prof.  
Fraser, J., M.A. Asst.  
The Tutorial Staff Lectrs.

*Physics*, v. also Chem.

Thrift, W. E., M.A.

Erasmus Smith's Prof. of  
Nat. & Exper. Philos.

Thrift, H., M.A. Asst.

*Political Economy*, v. Law

*Romance Languages*, v. also  
French, Ital.

Rudmose-Brown, T. B., M.A.

Aberd., D.Litt. Prof.

Starkie, W. F., B.A. (Spanish and  
French) Asst.

*Sanskrit and Comp. Philol.*

Canning, H., M.A. Prof.

*Theology, Pastoral*

Drury, T. W. E., M.A. Prof.

*Zoology and Comp. Anat.*

Gatenby, J. B., D.Phil. Ox., D.Sc.  
Lond. Prof.

King, D. S., B.A. Asst.

### Medicine

*Anæsthetics*

Kirkpatrick, T. P. C., M.D. Lectr.

*Bact. and Preventive Medicine*

Biggar, J. W., M.D. Lectr.

*Dermatology*

Beatty, W., M.D. Hon. Prof.

*Laryngology and Otology*

Woods, Sir Robt. H., M.D., M.Ch.  
Hon. Prof.

*Materia Med. and Pharmacy*

Moorhead, T. G., M.D. King's Prof.

*Med. Jurispr. and Hygiene*

Bewley, H. T., M.D. Lectr.

*Medicine, Institutes of*

Pringle, H., M.D. King's Prof.

Fearon, W. R., Sc.D. Asst.

*Medicine, Practice of*

Craig, J., M.D. King's Prof.

*Midwifery*

[King's Prof.  
Wilson, T. H., F.R.C.S.I.]

*Pathology*

O'Sullivan, A. C., M.D. Lectr.

Wigham, J. T., M.D. Asst.

Synge, V. M., M.B. Junr. Asst.

*Physic*

Purser, J. M., M.D. Regius Prof.

*Surgery and Anatomy*

Dixon, A. F., M.B., Sc.D.  
Prof. of Anat.

Taylor, Sir Wm., K.B.E., C.B.,  
M.D. Regius Prof. of S.

Gordon, T. E., M.B. Prof. of S.

Pearson, W., M.D. Asst. in S.

McConnell, A. A., M.B.  
Lectr. in Applied A.

West, C. M., M.D.  
Chief Demr. and Univ.  
Anatomist.

## GENERAL INFORMATION

Trinity College was founded and incorporated by Royal Charter in 1592 as "Mater Universitatis," but no other College has been founded, so that "Dublin Univ." and "Trinity College" are practically interchangeable terms. The Corporation of the College was put on its present basis by Letters Patent of 1637. Letters Patent of 1911 transferred the powers of making statutes from the Crown to the Corporation. The general government of the Univ. is in the hands of the Board of Trinity College, which consists of the Provost, Senior Fellows, 2 representatives of Junior Fellows, and 2 representatives of the non-Fellow Profs. The Univ. Council, formed by representatives from the various Faculties and Schools, has the right of appointment to most Professorships, and in conjunction with the Board can make changes in the curriculum, but otherwise has only advisory functions. The power of making new statutes was reserved to the Crown until 1911, when by Letters Patent this power was given to the Board subject to the consent of a majority of the Fellows and the approval of the Visitors.

The College occupies a large site in the middle of the city, with ample grounds for the athletic clubs.

THE LIBRARY of Trinity College has enjoyed since 1801 the privilege of receiving a copy of every book published in England. It contains 368,000 volumes and 2000 MSS., affording an unrivalled field for the study of Irish palæography. A catalogue of MSS. in the Library was published in 1900. There is a lending library of 6000 vols. bequeathed by the late W. E. H. Lecky, and departmental libraries in German and the Romance Languages, in Botany, and in Zoology.

MUSEUMS. The scientific museums include Zool. and Comp. Anat., Geol. and Mineral., Surg. and Med., Path., Mat. Med., Anthropom., Engin. Models, Nat. Philos. The Zoological are among the best collections in the country. The series of vertebrate osteology is extensive. Attached Laboratories offer all facilities for research work. The collection of Geological and Mineralogical specimens is also extensive.

LABORATORIES. Anthropol., Bio-Chem., Bot., Chem., Geol., Histology, Mat. Med., Mech. Engin., Pathology, Physical (Iveagh), Physiol., Zool.

HERBARIUM (rich in plants of N. America, India, S. Africa, and Australia). BOTANIC GARDENS, 8 acres.

The Astronomical Observatory of Trinity College is at Dunsink, 5 miles from the College. It is the official residence of the Royal Astronomer of Ireland.

Ample facilities for clinical studies and many appointments for graduates are available in numerous HOSPITALS, including the well-known Rotunda. The Irish High Court is situated within a short distance of the College.

DEGREES. Every student must take the B.A. before proceeding to any other degree, except those in music. The course lasts 4 yrs., but it is only necessary to keep 2 out of the 3 terms in each, or 8 in all. It is also possible to complete the course within 3 yrs. from entrance by taking the final examn. of the 1st yr. at the time of entering and keeping all 3 terms of the 2nd yr. However, all students not in a professional school are required to attend Arts lectures in every term, unless specially exempted (*e.g.* those earning their living by teaching). If exempted they are permitted to keep all of their 8 terms by examn. instead of by attendance.

For the first 2 yrs. (Junr. and Senr. Freshman) all subjects are compulsory: Algebra, Geom., Trig., Mech., Logic, Engl. Essay, Latin, Greek or French or Irish or German. After the examn. ("Little-Go") at the end of the 2nd yr. wide freedom of choice is allowed of subjects for the remaining (Junior and Senr. Sophister) yrs., and exemption from one subject is granted to Law, Engin., and Div. students. For Med. students there is a specially reduced Arts course throughout.

Pass Arts teaching, mainly given by the Tutor Fellows, is partly of a catechetical nature. Every student must choose one of the Tutor Fellows (see list above) as his Tutor and should apply to him for all information before and after entrance.

The *Honour B.A.*—known as a *Moderatorship*—can be taken in 11 different groups (*viz.* 1 Math., 2 Class., 3 Ment. and Mor. Philos., 4 Exp. Sc., 5 Nat. Sc., 6 Hist. and Pol. Sc., 7 Mod. Lit., 8 Leg. and Pol. Sc., 9 Eng. Sc., 10 Celtic, 11 Oriental Lang.), and undergraduate honours in the same subjects (except Nos. 9 and 11) can be obtained in each academic year and in some subjects in each term. The course lasts four years in the case of Nos. 1, 2, 4, 5, 6, 7, three

years in Nos. 3 and 10, and two years in No. 8. Instruction in these Honour courses is given partly by the Profs. and partly by the Tutorial staff.

A B.A. of three years' standing may be admitted M.A. There is no examn. for this, nor is a thesis required.

The B.D. is obtained by an examn. open to all grads. in Arts, and the D.D. is open to any B.D., eight years after taking B.A., and is awarded on a thesis or published Theol. work.

The LL.B. course covers 2 yrs.; the M.B., B.Ch., and B.A.O., 5 yrs.; B.Dent.Sc., 4 yrs.; B.A.I., 3 yrs. (optional 4th yr. in Elec. and Mech. Engin.); Agr. B. or Agr. (Forest) B., 4 yrs., of which 3rd and 4th are taken in Roy. Coll. of Sc. The Sc.B. and Ph.D. (v. p. 15) involve post-graduate study and research for 1 yr. and 2 yrs. respectively.

A candidate for the Sc.D. or Litt.D. must have at least 3 yrs.' standing as B.A., and submit important original work; for LL.D. must be of M.A. standing—a thesis or examn. is required; for M.D. must have taken the M.B. degree and be of M.A. standing; for M.Ch. must be a B.Ch. of 3 yrs.' standing; for M.A.O., a B.A.O. of 2 yrs.' standing; a thesis or examn. is required for M.D., an examn. for the M.Ch. or M.A.O. A candidate for M.Dent.Sc. must be a B.Dent.Sc. of 1 yr.'s standing, and pass an examn.; for M.A.I. must have practised his profession for 3 yrs. after graduating as B.A.I. The Mus.D. is granted after an exercise or practical test.

DIPLOMAS in Agric., Educn. (Primary and Higher), Econ. and Comm. Knowledge, Elec. Engin., Gynæc. and Obst. (1 yr. course), D.P.H., Religious Knowledge (women).

*Testimonium* in Divinity (2 yrs.' course).

RECOGNITION OF OTHER UNIVS., ETC. Credit is allowed for terms kept at Oxford or Cambridge, but no student or graduate of any other Univ. can take the B.A. unless he has kept at least 2 yrs. at Trinity College. No student can take any medical degree unless he has attended at least 3 yrs. in Trinity College.

A B.A., B.Sc., or M.A. of any of the undermentioned Univs. may be allowed credit *pro tanto* for the first 2 yrs. and the examn. held at their expiration: Aberd., Belf., Birm., Brist., Edin., Glas., Leeds, Liver., Lond., Manch., St. And., Sheff., Wales, and Nat. Univ. of Ireland.

A student who has passed two years in Arts studies at any of the undermentioned Univs. and passed the examns. belonging to that period is given credit *pro tanto* for the first academic year: Adel., All., Bom., Cal., McGill, Madr., Mel., N. Brun., N. Zea., Panj., Syd., Tas., Tor., King's Coll., Windsor.

A student who has passed the Matricn. examn. of any Univ. in S. Africa, including Latin, Maths., and either French, German, Dutch, or Greek, is admitted without further examn., and, if a Med. student, is excused the Prelim. Med. examn. Medical students are given credit for lectures and examns. in Zool., Bot., Chem., and Physics of any S. African Univ., and also for lectures and practical work in Anat. and Physiol., but not for the examns. in these last two subjects. Courses in Path. and Bact. at Cape Town and Witwatersrand are also recognized.

A student who has passed the Intern. examn. of any Univ. in S. Africa is permitted to present himself at the Final Freshman examn., with exemption from those subjects in which he has already passed at the Intern. examn.

A student who has passed the B.A. examn. of any Univ. in S. Africa is allowed credit for the 1st two collegiate yrs. and for the Final Freshman examn.

To students admitted to advanced standing the entrance fee is remitted and in most cases some of the half-yearly Arts fees.



In keeping terms students from S. Africa are allowed to substitute Dutch or French or German, when 2 languages are required. 3 exhibitions each are offered for medical students from S. Africa, on the nomination of the Univs. of S. Africa and Stellenbosch, value from £150 to £200 according to the number of years spent in Dublin (3-5).

Likewise the Board and Council are prepared, in the case of students of medicine, to consider applications from Colonial Univs. and Colls. for recognition of courses of instruction given by them.

Students from S. Africa should write to the Registrar of S. African students or fuller information.

No recognition granted under this scheme will exempt a student wishing to take the Dublin degree from spending at least three full years of Med. study in Trin. Coll.

The Univ. of Melbourne is entitled to nominate one of its Med. graduates to an exhibition of £100, with rooms rent free for 6 mos. in T.C.D., intended to defray, in part, the expenses incurred in obtaining the Diploma in Gynæc. and Obst.

**FEES.** Entrance, £15; Composition for all Arts Lectures, 20 gs. p.a.; medical course total (including Hospitals and Degree fees), about £150; Dental science total, about £200; Engineering, (3 yrs.) £40 (minimum), in addition to Arts Tuition fees; Divinity free for students in Arts, 20 gs. p.a. for others.

**SCHOLARSHIPS OPEN TO GRADUATES.** 2 studentships of £100 p.a. tenable for 5 years offered at the B.A. degree examn.; prizes from £50 upwards to elected honour graduates with conditions of study and research attached. Madden Prize Fund £424 p.a. awarded to unsuccessful candidates at Fellowships examn. or for research work or foreign study. A number of other prizes, etc. (including the National Hist., nearly £400), are open to graduates under 1st A. standing.

**RESIDENCE.** The College has accommodation for 320 students. Rent 6 to £30 p.a. (for rooms intended to accommodate 2 students); dinner in hall, 14s. a week. Trinity Hall accommodates 40 women; board and residence, £23:10s. to £28:10s. per term of 10 weeks. There is also a hostel for Divinity students of the Church of Ireland.

**PUBLICATIONS.** *Calendar*, vol. i. (Nov.), 4s., includes information as to courses and Pass Arts examn. papers, results of examns., degrees conferred, etc.; vol. ii. (occasional), lists of past honours, benefactors, etc.; *Examn. Papers* of the several Honour schools; of the several Professional schools; of Entrance examns. and prizes; and of Pass Arts are published in pamphlet form at 1s. per set. The final *War List* has been published, price 2s. 6d. *Book of T.C.D.*, 591-1891, 21s. (Hodges, Figgis & Co., Dublin). *Hermathena* (occasional) original papers in Arts subjects. *T.C.D. (Students')*, 3d. weekly.

## THE YEAR 1921-22

**BENEFACTION.** £570 subscribed to found a prize in Engineering in memory of Prof. Alexander's services in the school (1887-1921).

**NEW BUILDINGS.** The Medical School buildings have been reconstructed so as to provide a large reading-room and library for medical students. A building to contain baths for students is in course of construction. The cost of this will be defrayed by the gift of £20,000 from Lord Iveagh, mentioned last year. The dept. of Physiology has been improved by a new Bio-Chemical

Lab. and a Dem. Theatre. The dept. of Zoology has been enlarged and re-equipped.

**OTHER DEVELOPMENTS.** The schemes adopted in view of the State grant of £30,000 p.a. promised by the 1920 Act are still in abeyance, owing to the delay in establishing the Irish Free State and consequent uncertainty as to what financial assistance will be given to Trinity College.

A scheme, starting Michaelmas 1922, has been arranged whereby the students in the Church of Ireland Training College for Primary Teachers will be lectured in part in Trinity College, and will count the 2 yrs. of their training course as equivalent to the 2 freshman yrs., and can thus obtain a degree at any future time in 2 yrs.

An arrangement has been made with the R.C.Sc.I., which will enable its students to obtain the degrees of Agr.B., Sc.B., B.A.I. for work done at the College of Science, provided they take their B.A. degree in Trinity College in the way usual for professional students. A fourth-year course in Mech. Engineering in the College of Science will be open for Trinity College graduates in Engineering.

Consequent on the withdrawal of the British Army from the Irish Free State the O.T.C. was disbanded by the War Office. Most of the plate belonging to the Corps (including that presented by the citizens of Dublin in commemoration of the services of the Corps in the 1916 rebellion) was presented to the College.

**HONORARY DEGREES.** *LL.D.*—Rt. Hon. T. F. Molony; *Litt.D.*—R. S. Conway, H. J. C. Grierson; *M.Ch.*—G. E. Armstrong; *M.A.*—J. E. Healy.

**OTHER DEGREES.** B.A., 241 (including 47 women); M.B., B.Ch., B.A.O., 77; B.A.I., 22; B.Dent.Sc., 2; LL.B., 12; M.A.I., 1; M.Ch., 1; M.A., 64; B.D., 5; D.Sc., 2; *Litt.D.*, 2; M.D., 6; LL.D., 3; D.D., 1.

**NUMBER OF STUDENTS** in Arts on July 1, 1922, 1193, including 115 graduates. In addition, about 140 Medical students and 66 Training College students not included in above.

**INTERCHANGE** of a French lecturer with a Chemistry lecturer effected with Toulouse.

**DEATH.** E. H. Taylor, Reg. Prof. of Surg. **RETIREMENT.** A. Stokes, Prof. of Bact., on apptmt. to Guy's Hospital; Sir L. White King.

# THE NATIONAL UNIVERSITY OF IRELAND

VISITOR—H.M. THE KING.

CHANCELLOR—EAMON DE VALERA, B.A., B.Sc.

VICE-CHANCELLOR—PATRICK J. MERRIMAN, M.A. President, Univ. Coll.,  
Cork—*until* Dec. 31, 1924.

PRO-VICE-CHANCELLORS—THE PRESIDENTS, UNIV. COLLS., DUBLIN  
AND GALWAY, AND ST. PATRICK'S COLL., MAYNOOTH.

REPRESENTATIVES IN THE PARLIAMENT OF SOUTHERN IRELAND—  
M. HAYES, M.A.; J. MACNEILL, B.A., D.Litt.; W. MAGENNIS,  
M.A.; W. F. P. STOCKLEY, M.A.

REGISTRAR—SIR JOSEPH MCGRATH, LL.D.

CONSTITUENT COLLEGES. University Colleges, Dublin, Cork, and  
Galway.

RECOGNIZED COLLEGE. St. Patrick's College, Maynooth.

## PROFESSORS AND LECTURERS, January 1, 1923

Prof. of Catholic Theology—Peter Finlay, S.J.

Staffs of the Univ. Colleges, *v. infra*.

Recognized Teachers in approved degree courses in St. Patrick's  
College, Maynooth (President—Rt. Rev. Monsignor MacCaffrey, Ph.D.).  
*Classics*—J. F. D'Alton, M.A., D.D., D.Litt.; T. Fahy, M.A.; M.  
Sheehan, M.A., D.D., D.Ph. *Eastern Languages*—P. Boylan, M.A.  
*English*—C. Mulcahy; P. MacSweeney, M.A. *French and German*—  
L. Rigal, M.A. *Irish*—G. O'Nolan, M.A. *Maths. and Math. Physics*—  
P. J. Browne, M.A., D.Sc. *Expl. Physics*—P. J. Nolan, M.Sc., Ph.D.,  
*Mental and Moral Philos.*—M. Forker, D.Ph.; P. Coffey, D.Ph.;  
J. O'Neill, D.Ph. *Music*—..... *Welsh*—P. Walsh, M.A.

## GENERAL INFORMATION

Queen's University in Ireland, founded in 1850, was replaced in 1880 by  
the Royal University of Ireland, which was dissolved along with Queen's  
College, Belfast, on Oct. 31, 1909. On this date the National University of  
Ireland, Univ. College, Dublin, and Queen's University of Belfast came into  
being, and the Colleges previously known as Queen's at Cork and Galway  
became with the new College at Dublin constituents of the N.U.I.

FACULTIES. (1) Arts, (2) Philosophy and Sociology, (3) Celtic Studies, (4)  
Science, (5) Law, (6) Medicine, (7) Engineering and Architecture, (8) Commerce.

Music is included in Arts and Celtic Studies. Classes are held in all Faculties at each of the constituent Colleges, and in 1, 2, 3, and 4 at Maynooth.

DEGREES: B.A., M.A., D.Litt., B.Mus., D.Mus., D.Litt.Celt.; B.Sc., B.Agr.Sc., M.Sc., M.Agr.Sc., D.Sc.; LL.B., LL.D.; M.B., B.Ch., B.A.O., M.Ch., M.A.O., M.D., B.Sc. and D.Sc. in Pub. Health, B.D.S., M.D.S.; B.E., B.Arch., M.E., M.Arch.; B.Comm., M.Comm.; Ph.D.

Course for a First degree in any faculty—9 terms in one of the Constituent Colls. or St. Patrick's.

The M.Sc., M.Agr.Sc., D.Sc., B.Sc., Pub. Health, M.E., M.Arch., Ph. D. may be conferred on graduates or other students for research under prescribed conditions in the Univ. or in a Constituent Coll. during at least 3 terms for a Master's degree or 6 terms for the Doctorate.

*Diplomas* are offered in the subjects of Faculties 1, 3, 8, and in several others; certificates in Commercial subjects. A Higher Diploma in Educn. may be obtained by a graduate of any Univ. of the U.K. or other approved Univ. after a course in one of the Constituent Colls.

FEES: Matricn., £3. Combined examn. and degree, £9 to £21. Diplomas £2 to £5.

STUDENTSHIPS, ETC., FOR GRADUATES. Five of £200 each, tenable for 2 yrs. outside Ireland (to which a prize for a further year of Irish Historical Research may be added), open to graduates of the Univ. of not more than 4 yrs.' (one in Medicine, 2 yrs.) standing; one of £150 in Mental and Nervous Diseases; one of about £40; prize of £100 for Irish Historical Research.

PUBLICATION. *Calendar* (July), 2s.

THE YEAR 1922. Degrees conferred: B.A.—171 (including women, 31); B.Sc.—45 (women, 18); M.B., etc.—171 (w., 29); B.Com.—32 (w., 18); B.E.—34; B.D.S.—3 (w., 1); B.Mus.—1 (w.); B.Agr.Sc.—3; LL.B.—3; M.A.—19 (w., 4); M.Sc.—8; M.A.O.—1 (w.); M.E.—1; M.D.—5 (w., 1); Ph.D.—7; D.Litt.—1; D.P.H.—6 (w., 2); Dip.Ed.—46 (w., 5); Higher Dip. Ed.—43 (w., 28); Certif. in Com.—1.

# UNIVERSITY COLLEGE, DUBLIN

VISITOR—H.M. THE KING.

PRESIDENT—D. J. COFFEY, M.A., M.B., B.Ch., B.A.O., LL.D.

REGISTRAR—Prof. A. W. CONWAY, M.A., D.Sc., F.R.S.

SECRETARY AND BURSAR—J. W. BACON, M.A.

LIBRARIAN—J. J. O'NEILL.

## PROFESSORS AND LECTURERS OF THE UNIVERSITY, January 1, 1923

<i>Accountancy</i>		<i>Education</i>	[Prof.]
Donnor, D., A.C.A.	Lectr.	Corcoran, T., S.J., B.A., D.Litt.	
<i>Agriculture</i>		<i>Engineering, Civil</i>	
Sw, J. P., A.R.C.Sc.I.	Prof.	Purcell, P. F., M.A., M.A.I.	Prof.
<i>Anatomy</i>		<i>English Lang. and Philology</i>	
Loughlin, E. P., B.A., M.B., B.Ch., B.A.O.	Prof.	O'Neill, G., S.J., M.A.	Prof.
<i>Archæology, Celtic</i>	[Prof.]	<i>English Literature</i>	
Calister, R. A. S., M.A., Litt.D.		Donovan, R., B.A.	Prof.
<i>Architecture</i>		<i>French and Romance Philol.</i>	
....	Prof.	Chauviré, R., D. ès L.	Prof.
<i>Banking and Finance</i>		<i>Geology</i>	
St, F. L., LL.D.	Lectr.	Seymour, H. J., B.A., B.Sc.	Prof.
<i>Botany</i>		<i>German</i>	
Stler, J. B., M.A., M.B., B.Ch., B.A.O.	Prof.	Macken, Mrs., M.A.	Prof.
<i>Chemistry</i>		<i>Histology, v. Physiology</i>	
Stan, H., M.A., D.Sc.	Prof.	<i>History</i>	[Prof.]
<i>Classics</i>	[Prof.]	O'Sullivan, J. M., M.A., Ph.D.	
Stowne, H., S.J., M.A. (Greek)		<i>History, Early, including Mediæval Irish</i>	
Stemple, P., M.A. (Latin)	Prof.	MacNeill, J., B.A., D.Litt.	Prof.
<i>Commerce</i>		<i>History, Modern Irish</i>	
Stields, B. F., M.A.	Prof.	Hayden, Mary T., M.A.	Prof.
<i>Dental Mechanics</i>		<i>History, Municipal</i>	
Sttler, J. I., L.D.S.	Prof.	Webb, J. J., M.A., LL.D.	
<i>Dental Surgery</i>	[Prof.]	Dub. Corpn. Lectr.	
Steridan, E., L.D.S., F.R.C.S.I.		<i>Irish, Early and Mediæval</i>	
<i>Economics, National, of Ireland</i>		Bergin, O., B.A., Ph.D.	Prof.
Sttham, C. H., B.A.	Prof.	<i>Irish Lang. and Lit., Modern</i>	
		Hyde, D., LL.D., D.Litt.	Prof.

<i>Irish</i>		<i>Physics, Experimental</i>	
O'Farrelly, Agnes, M.A.	Lectr.	Nolan, J. J., M.A., D.Sc.	Prof.
<i>Italian and Spanish</i>		Dowling, J. J., M.A.	Lectr.
Degani, Maria A., Dipl.	Univ.	<i>Physiology and Histology</i>	
Padua	Prof.	O'Connor, J. M., B.A., M.D.	Prof.
<i>Law, Const., and Wrongs</i>		<i>Political Economy</i>	
MacNeill, J. G. Swift, M.A.	Ox.,	Finlay, T. A., S.J., M.A.	Prof.
K.C.	Prof.	<i>Welsh</i>	
<i>Law, Jurispr., and Internat. and Roman</i>		Jones, J. Ll., M.A., B.Litt.	Prof.
[Prof.]		<i>Zoology</i>	
Murnaghan, J. A., M.A., LL.D.		Sigerson, G., M.D., M.Ch., D.Litt.	[Prof.]
<i>Law of Property and of Contracts</i>		<b>Medicine</b>	
Clery, A. E., B.A., LL.D.	Prof.	<i>Hygiene and Med. Jurispr.</i>	
<i>Mathematics</i>		Meenan, J. N., M.B., B.Ch.,	
M'Weeney, H. C., M.A.	Prof.	B.A.O., D.P.H.	Prof.
<i>Mathematics, Pure</i>		<i>Mat. Med. and Therap.</i>	
Egan, M. F., S.J., M.A.	Lectr.	Hayes, Maurice, F.R.S.C.I.	Prof.
<i>Mathematical Physics</i>		<i>Medicine</i>	
Conway, A. W., M.A., D.Sc.,	D.Sc.,	O'Carroll, J. F., M.D., M.Ch.,	
F.R.S.	Prof.	LL.D., F.R.C.P.I.	Prof.
<i>Medicine and Surgery, v. infra</i>		<i>Midwifery and Gynæc.</i>	
<i>Music</i>		Smith, A. J., M.B., M.Ch., M.A.O.,	
Larchet, J. F., Mus.D.	Prof.	F.R.C.S.I.	Prof.
O'Dwyer, R. (Irish M.)		<i>Ophthalmology</i>	
Dub. Corpn.	Prof.	Werner, L., B.A., M.B., B.Ch.,	
<i>Oriental Languages</i>		B.A.O., F.R.C.S.I.	Prof.
Boylan, P., M.A.	Prof.	<i>Pathology and Bacteriology</i>	
<i>Philosophy</i>		M'Weeney, E. J., M.A., M.D.,	
Cronin, M., M.A., D.D. (Ethics		M.Ch., M.A.O., D.P.H.,	
and Politics)	Prof.	F.R.C.P.I.	Prof.
Shine, J., M.A. (Logic and Psy-		<i>Pathology, Special</i>	
chology)	Prof.	Crofton, W. M., B.A., M.D.	Lectr.
Magennis, W., M.A. (Metaphysics)		<i>Surgery</i>	
	Prof.	M'Ardle, J. S., M.Ch., F.R.C.S.I.	[Prof.]

## GENERAL INFORMATION (v. also p. 269)

The College was constituted by Royal Charter in 1909. The LIBRARY, 60,000 vols., includes the books of the late Catholic Univ. and R.U.I. and the Zimmer Celtic Library. MUSEUMS: Ancient History. LABORATORIES include those of the late R.U.I.

COURSES are provided for the degrees of the N.U.I. in all Faculties.

FEES for tuition, annual, in degree courses: Arts or Comm.—14 gs.; Science—£20 to £25; Engin.—£20 to £23; Law (in addition to Arts)—8 gs.; Med. (including Coll. Hospl.), whole period—£165.

COLLEGE SCHOLARSHIPS, post-graduate in Arts or Science, 5 of £60.

RESIDENCE. Hostels for men and for women. Students are subject to supervision by Deans of residence.

PUBLICATION. *Calendar*, Sept., 2s.

THE YEAR 1920-21. *Number of students* preparing for Bachelor's degrees, 1179; Master's degrees or Higher Dipl. in Ed., 50; D.P.H., 17; other Diplomas, 64; occasional, 7; Total, 1317, of whom 65 were non-matriculates, 293 women. Full-time, 1285 (291 women). Students from King's Dominions overseas, 13. *Degrees conferred* on students of the College: B.A., 94; B.Sc., 15; M.B., 95; LL.B., 2; B.D.S., 4; B.E., 12; B.Comm., 14; B.Arch., 1; B.Agr.Sc., 1; M.A., 18; M.Sc., 6; M.D., 3; Higher Dip. Ed., 26; D.P.H., 11.

# UNIVERSITY COLLEGE, CORK

VISITOR—H.M. THE KING.

PRESIDENT—P. J. MERRIMAN, M.A.

REGISTRAR—A. O'RAHILLY, M.A., B.Sc., Ph.D.

SECRETARY AND BURSAR—J. DOWNEY.

LIBRARIAN—J. FAWCETT, M.A.

## PROFESSORS AND LECTURERS OF THE UNIVERSITY, January 1, 1923

<i>Accounting</i>		<i>Education, History of</i>	
MacCarthy, C. P., M.Comm. Lectr.		M'Sweeney, E. P.	Lectr.
<i>Agricvlture</i>		<i>Electrical Technology</i>	
.....	Prof.	Belas, P. E., B.A., M.Sc.	Lectr.
<i>Anatomy</i>		<i>Engineering, Civil</i>	
Fitzgerald, D. P., B.A., M.B.,		Walsh, H. N., M.E.	Prof.
B.Ch., B.A.O.	Prof.	Coffey, Patrick, B.E.	Asst.
O'Connor, W. F., M.B., B.Ch.,		<i>English</i>	[Prof.
B.A.O., F.R.C.S.I.	Asst.	Stockley, W. F. P., M.A. Dub.	
<i>Archæology</i>		<i>French</i>	
Power, P., M.R.I.A.	Prof.	Aherne, Catherine, B.A.	Demr.
<i>Architecture</i>		<i>Geology and Geography</i>	
Hill, H. H., B.A.	Lectr.	Swain, I., B.A.	Prof.
<i>Biology</i>		<i>German</i>	
Quinlan, Christina, M.Sc.	Asst.	Curran, Mary, M.A.	Prof.
<i>Botany</i>	[Prof.	<i>History</i>	
Cummins, Maj. H. A., M.D., C.M.G.		Hogan, J., B.A.	Prof.
<i>Chemistry</i>		<i>Irish Lang. and Lit.</i>	
Dixon, A. E., M.D. Dub.	Prof.	O'Donoghue, T.	Prof.
Taylor, John, D.Sc.	Asst.	O'Donoghue, E.	Lectr.
<i>Classics</i>		<i>Law</i>	
Treston, H. J., M.A.	Prof.	Dunlea, W. J., LL.D. (Contracts,	
Porter, W. H., M.A. Dub.	Lectr.	etc.)	Prof.
<i>Dental Materia Med.</i>		Moloney, H. J., B.L. (Real Pro-	
Cantillon, E. V., M.B., B.Ch.,		perty)	Prof.
B.A.O.	Asst.	<i>Mathematics</i>	
<i>Dental Mechanics</i>		Conran, M. J., M.A.	Prof.
Sheedy, G., L.D.S.	Lectr.	<i>Mathematical Physics</i>	[Prof.
<i>Dental Surgery</i>		O'Rahilly, A., M.A., B.Sc., Ph.D.	
Hackett, J. R., M.B., B.Ch.,		<i>Medicine and Surgery, v. infra</i>	
B.A.O., L.D.S.	Lectr.	<i>Music</i>	
<i>Economics and Commerce</i>		Lacy, F. St. J., F.R.A.M.	Prof.
Smiddy, T., M.A.	Prof.	<i>Philosophy</i>	[Prof.
<i>Education, Methods of</i>		Fitzgibbon, T. E., B.A., Ph.D.	
O'Sullivan, Eliz. M., M.A.	Prof.		



Stokes, G. J., M.A. Dub. (P. and Jurispr.)	Prof.	<i>Medical Jurisprudence</i>	O'Sullivan, P. T., M.D., B.Ch., B.A.O.	Prof.
Callaghan, Rev. John, M.A.	Asst.	<i>Physics</i> , v. also Maths.		
Bergin, W., M.A. Dub.	Prof.	<i>Medicine</i>	Cummins, W. E. A., M.D., M.Ch.	[Prof.]
		<i>Physiology</i>		
Barry, D. T., M.D., D.Sc., D.P.H., F.R.C.S.	Prof.	<i>Mental Diseases</i>	Fitzgerald, J. J., M.B., B.Ch., B.A.O.	Lectr.
O'Donovan, J. M., M.Sc., M.B.	Asst.	<i>Midwifery</i>	Corby, H., B.A., M.D., M.Ch.	Prof.
		<i>Romance Languages</i> , v. also French		
Ryan, Mary, M.A.	Prof.	<i>Ophth. and Otology</i>	Sandford, A. W., M.D., M.Ch.	Prof.
		<i>Spanish</i>	Dub.	
Cooke, W. C.	Lectr.	<i>Pathology</i>	Moore, A. E., M.B., B.Ch., B.A.O.	Prof.
		<i>Zoology and Embryology</i>	Enright, Margt. A., M.B., B.Ch., B.A.O., D.P.H.	Asst.
Renouf, Louis P. W., B.A., Dip. Agric.	Prof.	<i>Medicine</i> (for subjects of first 2 yrs.—Anat., etc., v. <i>supra</i> )		
		<i>Hygiene</i>	Pearson, C. Y., M.D., M.Ch., F.R.C.S.	Prof.
Donovan, D. D., L.R.C.P. and S.E.		<i>Materia Med.</i>	Pearson, C. B., M.D., B.Sc.	Asst. & Demr.
Dundon, J., M.B., F.R.C.S., B.Ch., B.A.O., F.R.C.S.	Prof.			

## GENERAL INFORMATION (v. also p. 269)

Queen's College, Cork, founded in 1845, became a constituent College of the N.U.I. in 1908.

**LIBRARY:** 60,000 vols., including the d'Arbois Jubainville collection of Celtic works. **MUSEUMS:** Archæol., Ethnol., Geol., Mineral., Nat. Hist., Med.

**LABORATORIES.** Biol., Chem., Engin. (Testing—200,000 lb. machine—and Hydraulics), Geol., Physics, Medical School. **BOTANICAL GARDENS.** OBSERVATORY with 8" equatorial and 11" photo. telescopes, seismograph, and 4" siderostat.

Complete COURSES provided for all degrees and diplomas of the Univ., except 2 years in the B.Sc.Agric. course. Students are also prepared for the exams. of the Univ. of London.

Commerce students can do 6 mos.' practical work in railway or accountants' offices, etc. Courses in Engin. (Mech., Elec., Chem., Workshop Practice, Design, and Drawing) at the Municipal Tech. Sch. qualify for the B.E. degree.

**FEES** for tuition, including College fee: Arts, £36:10s. to £41:10s.; Science, £55; Engin., £63; Med., £145, including Hospl. fees; Dentistry, £160:5s., including Hospl. fees; Music, £35.

**RESIDENCE.** Hostel for men (charitable trust, R.C. only); students are supervised by Officers of Residence.

**PUBLICATION.** *Calendar* (Sept.), 1s.

**THE YEAR 1921-22.** *Number of Students* (1918-19 to 1921-22): men—492, 499, 494, 473; women—137, 161, 170, 187.

# UNIVERSITY COLLEGE, GALWAY

PRESIDENT—ALEXANDER ANDERSON, M.A. Camb., D.Sc., LL.D.

REGISTRAR AND SECRETARY—REV. J. HYNES, M.A., B.D.

## PROFESSORS AND LECTURERS OF THE UNIVERSITY,

January 1, 1923

<i>Anatomy</i>		<i>Law and Jurisprudence</i>	
Shea, S., M.B., B.Ch., B.A.O. Prof.		Sheehy, R. J., LL.B. Prof.	
<i>Archæology, Celtic</i>		<i>Mathematics</i>	
Hynes, J., M.A., B.D. Lectr.		Power, M., M.A., B.Sc. Prof.	
<i>Chemistry</i>		<i>Medicine and Surgery</i> [Prof.	
Dillon, T., M.A., D.Sc. Prof.		Colahan, N. W., M.D., M.Ch.	
<i>Classics, Ancient</i> [Prof.		(Fevers, Materia M., etc.)	
M'Elderry, R. K., M.A. Camb.		Mahon, R. B., M.D., M.Ch.,	
<i>Economics, Commerce, &amp; Acctcy.</i>		F.R.C.S.E. (Practice of M.)	
M'Bryan, F., M.A., H.Dip.Ed. Prof.		Prof.	
<i>Education</i>		English, Adeline, M.B., B.Ch.,	
O'Kelly, T., M.A., B.D. Prof.		B.A.O. (Mental Diseases)	
<i>Engineering, Civil</i>		Lectr.	
Rishworth, F. S., B.E., B.A.,		Kinthead, R. J., B.A., M.D. Dub.	
A.M.I.C.E. Prof.		(Obst. and Gynæc.) Prof.	
<i>Engineering, Electrical</i>		MacEnri, S. P., M.A., M.D. Dub.,	
Griffith, W. G., B.Sc. Lond.,		B.Ch. (Ophth. and Ot.) Prof.	
A.M.I.E.E., M.I.C.E.I. Prof.		Walsh, T., M.A., H.Dip.Ed., B.Sc.,	
<i>English Language and Lit.</i>		M.D., D.P.H. (Path.) Prof.	
Byrne, W. A., M.A. Prof.		Brereton, W. W., L.R.C.S.I.,	
<i>Geology and Mineralogy</i>		M.R.C.P.I. (Practice of S.)	
Mitchell, J., B.Sc., B.E. Prof.		Prof.	
<i>German</i>		Lectrs. in Med. Jur. & Hygiene :	
Cooke, Miss M. M., M.A. Prof.		Profs. Kinthead and Walsh.	
<i>History (Special Reference to</i>		<i>Natural History</i> [Prof.	
<i>Irish H.)</i> [Prof.		Mangan, J., M.A., F.R.C.Sc.I.	
Donovan O'Sullivan, Mrs., M.A.		<i>Philosophy</i>	
<i>Irish Lang., Philol., and Lit.</i>		Howley, J. F. W., M.A. Prof.	
O'Maille, T., M.A. Manc., Ph.D.		<i>Physics</i>	
Frei Prof.		The President Prof.	
<i>Irish, Modern</i>		<i>Physiology</i>	
MacEnri, S. P., M.A., M.D. Lectr.		Donegan, J. F., M.B., B.Sc. Prof.	
		<i>Romance Languages</i>	
		O'Brien, L., M.A. Prof.	

## GENERAL INFORMATION (v. also p. 269)

Queen's College, Galway, opened in 1849, became a constituent College of the N.U.I. in 1908.

**LIBRARY:** 50,000 vols. **LABORATORIES:** Physics, Chem., Biol., Physiol., Path., Geol., Engin. **MUSEUMS:** Nat. Hist., Mat. Med., Gynæc., Anat. Dept.

**DEGREE COURSES** in Arts, Celtic, Science, Law, Med., Engin., Commerce. Courses for Diplomas in Educn., Commerce, and Public Health.

Med. degree students are required to spend 1 yr. at a Metropolitan Hosp. after a 4 yrs.' course in the College and 2 yrs. in the Galway Hospitals.

**FEES.** College, £2 (women, £1). Degree courses (approximately): Arts, £26; Science, £30 to £45; Law, £12; Medicine (including 2 years General Hospital fees), £78; Engineering, £46; Commerce, £26. Post-graduate or research course, £5.

**SCHOLARSHIPS** open to students of the Coll. on graduation: 4 of £40.

**RESIDENCE.** The cost of board and lodging for a student varies from 26s. to 30s. a week. Every student is required to register under a Dean of Residence, who exercises supervision over the general conduct of students outside the precincts, and every woman student under a Lady Supt., who exercises supervision over their conduct within the precincts of the College.

**PUBLICATIONS.** College *Handbook* and list of licensed lodging-houses, free; *Calendar* (post free, 1s. 4d.); Regns. for Degrees and Courses (3½d.); Regns. for Scholps. and Diploma in Educn. (3d.), from O'Gorman and Co., Galway; Univ. Examn. Papers (post free, 1s. 7d.), from Supervisor of Examns., Univ. Coll.

**THE YEAR 1921-22.** Grant of £1500 received from County Councils of Connaught. *Number of Students:* in Arts, 34; Science, 17; Law, 2; Med., 96; Engin., 25; Commerce, 30. Total full-time students preparing for first degree, 204, including 61 women; taking post-grad. courses for higher degrees, 9 full-time; diploma students, full-time 4, part-time 14. Grand total, 222. *Degrees obtained:* B.A., 10; B.Sc., 2; M.B., B.Ch., B.A.O., 12; B.E., 11; B.Comm., 4; M.A., 3; Higher Dip. in Ed., 6.

## ROYAL COLLEGE OF SCIENCE FOR IRELAND, DUBLIN

DEAN—F. E. HACKETT, M.A., M.Sc., Ph.D.

ACTING REGISTRAR—M. QUANE.

PROFESSORS, LECTURERS, ETC., January 1, 1923

[Associates of the College marked \*.]

<i>Agriculture</i> , v. also For., Hort., Vet.		<i>English and Education</i>	
Wilson, J., M.A., B.Sc.	Prof.	Williams, W. J., M.A.	Lectr.
<i>Agric. Botany</i>		<i>Forestry</i>	[Prof.]
*Gorman, M. J.	Lectr.	Henry, A., M.A., F.L.S., M.R.I.A.	
<i>Agric. Chemistry</i>		<i>Geology</i>	[Prof.]
Stephenson, G.	Lectr.	Cole, G. A. J., F.R.S., M.R.I.A.	
<i>Agric. Econ., Bookkeeping, etc.</i>		*Fannin, R. J.	Demr.
*Cole, R. D.	Lectr.	<i>Horticulture</i>	
<i>Bacteriology</i>		*Sherrard, G. O.	Lectr.
Denham, C. H., B.A., M.B.	Lectr.	<i>Mathematics</i>	[Prof.]
<i>Botany</i>		Orr, W. McF., M.A., D.Sc., F.R.S.	
Johnson, T., D.Sc., F.L.S., M.R.I.A.	Prof.	Johnston, J. P., M.A., Sc.D.	Lectr.
*O'Connor, P.	Demr.	<i>Physics and Elec. Engineering</i>	
<i>Chemistry</i> [Acting Prof.]		Hackett, F. E., M.A., M.Sc., Ph.D.	Prof.
*Adeney, W. E., D.Sc., F.I.C.		*Allen, R. G., B.Sc., A.M.I.E.E.	Lectr.
<i>Chemistry, Organic</i>		*O'Callaghan, P.	Demr.
O'Farrelly, A., M.A., F.I.C.	Lectr.	<i>Veterinary Hygiene</i>	
<i>Chem., Phys. and Metall.</i> [Lectr.]		Mason, F. C., M.R.C.V.S.	Lectr.
*Leonard, A. G. G., B.Sc., Ph.D.		<i>Zoology</i>	[Prof.]
<i>Engineering</i> , v. also Physics		Carpenter, G. H., D.Sc., M.R.I.A.	
.....	Prof.	*Torrens, D. S.	Demr.
*Taylor, J., M.A.	Lectr.		
*Warwick, F. W., B.A., B.E.	Demr.		

### GENERAL INFORMATION

The College is housed in new buildings, and the LABORATORIES are fitted throughout with all modern appliances. Facilities for technical research in all branches of Chemistry, *e.g.* extraction of metals, production of metallic alloys, glazes, enamel, glass, pigments, paints, coal-tar derivatives, peat products, synthetic drugs. Engineering Pattern Shop, Foundry, Smithy, Machine Shop ; examples of types of engines aggregating 700 H.P. Hydraulics

and Hydraulic Machinery Labs. Testing Machines recording up to 100 tons. Elect. Engin. Labs. with D.C. and A.C. machines. Extensive Physics, Agric., and Nat.Sc. equipment. LIBRARY with 30,000 Scientific and Tech. books, 10,000 pamphlets, numerous maps, etc.

The Regular COURSES extend over 4 yrs. leading to the *Associateship* of the College in Agric. (4 groups), Applied Chem., Engin., Science Teachers' courses (Tech., Expl. Sc., Nat. Sc., Rural Sc.).

The *Fellowship* of the College may be awarded to any Associate of at least 3 yrs.' standing who (1) submits a satisfactory thesis embodying results of original scientific research or investigation or treating critically some branch of Science, or (2) has contributed in a marked degree to the advancement of Science.

Several valuable *Scholarships* are attached to the College, and a number of *Research Studentships* are available.

Short *Summer Courses* are held in the College in Science subjects by the Dept. of Agric. and Tech. Instruction for Ireland.

THE YEAR 1921-22. *Number of Students*, 350. *Number of Diplomas* granted: Fellowship, 0; Assoc., 42.

At the beginning of the session 1922-23 the College building was temporarily closed to students, and classes are (Jan. 1923), in consequence, conducted in buildings belonging to the N.U.I. and Dept. of Agric. and Tech. Instruction.

# CANADIAN UNIVERSITIES

In *Nova Scotia*: ACADIA, DALHOUSIE, KING'S COLLEGE, ST. FRANCIS XAVIER. In *New Brunswick*: NEW BRUNSWICK, MOUNT ALLISON. In *Quebec*: BISHOP'S COLLEGE, LAVAL, MCGILL, MONTREAL. In *Ontario*: MCMASTER, OTTAWA, QUEEN'S, TORONTO, TRINITY COLLEGE, VICTORIA, WESTERN. *Western Provincial Univs.*: MANITOBA, SASKATCHEWAN, ALBERTA, BRITISH COLUMBIA.

## GENERAL DESCRIPTION

[Contributed by A. Stanley Mackenzie, Ph.D., D.C.L., President of Dalhousie Univ., President for 1920 of the Conference of Canadian Univs.]

It is probably not true to say that Canada has evolved a distinctive type of Univ.; and yet Canadian higher institutions of learning differ in many ways from the corresponding institutions in the British Isles and in the United States. One might divide Canadian Univs. into groups, determined by the prototype after which each was consciously or unconsciously modelled. In the first group are those which followed closely the Oxford tradition—King's, New Brunswick, Bishop's, Toronto, and some of its federated colleges (University, Trinity, Wycliffe). The Univs. in the second group are those which modelled themselves on Edinburgh, viz. Dalhousie, McGill, Queen's. Laval in Quebec, Laval in Montreal (which has lately changed its name to that of the Univ. of Montreal), and Ottawa have followed closely the forms and tradition of France. The four western provincial Univs. of Manitoba, Saskatchewan, Alberta, and British Columbia, and especially the three last, bear a close resemblance to the State Univs. of the United States. The Univs. which have not been named are perhaps more free from direct imitation of older types.

As the years have gone by all these institutions, while maintaining individuality and evidences of their original form, have tended to uniformity in many important regards. For instance, they all require four years for the Bachelor degree in Arts or in Science. Again, they have a common standard of preliminary education for admission to the course leading to these degrees. This standard is that attained by a pupil who has completed three years of a High School course superimposed on eight years in the common schools. This standard is called Junior matriculation. If a pupil has successfully completed the fourth year of the High School course in the proper subjects, or passes the equivalent Senior matriculation examination, he can enter the second year and complete the course for the degree in three years. This practically amounts to saying that High Schools or Collegiate Institutes which have a fourth year course give in that year about the same work as is done in the first year of the Univ. course.

**JUNIOR MATRICULATION.** Students can satisfy the Entrance requirements of the Univs. either by examination or on certificate from a standard High School or accredited Preparatory School or Collegiate

Institute or School. Such certificate is, however, not accepted as such, but considered subject by subject; that is, it must show a Pass in the Required Subjects of matriculation. These required subjects differ somewhat from one Univ. to another. Practically all Univs. require for candidates for the B.A. degree the following six subjects: (1) English, (2) History, (3) Algebra (through quadratics), (4) Geometry (at least four books), (5) Latin, (6) a second foreign language. There is in nearly every Univ. a seventh subject; it is usually a science (in some cases specified, in others elective), but in many cases a third foreign language is accepted instead.

Where a course in Pure Science is given leading to the degree of B.Sc. the requirements are as above, except that the two foreign languages are French and German.

There is much more variation in the requirements for entrance to the courses in Applied Science, or Engineering; but the best schools of Applied Science require in addition to the requirements (1) and (2) of Arts, Advanced Algebra, Advanced Geometry, Trigonometry, Physics, Chemistry, and at least one foreign language.

The requirements for entry upon the study of Medicine are generally the same as those for Arts. The same is true for Dentistry except that no second foreign language is required.

The requirements for entry upon the study of Law are the same as those for Arts, except in the case of Osgoode Hall (affiliated with the Univ. of Toronto), where Senior matriculation is required, and of Dalhousie, where a year of Arts in a Univ. is required. *See also* under Toronto.

**CURRICULUM.** Speaking very generally, one can say that about one-half of the course for the degree of B.A. is prescribed and the other half elective; but these elective subjects are commonly to be distributed among certain broad groups of allied subjects in a specified way, varying with the individual Univs. The prescribed work includes English, History, two foreign languages, one of which is usually Latin (British Columbia requires only one), Philosophy, Mathematics, and Science. In the case of the B.Sc. degree in Pure Science the two foreign languages required are French and German.

A feature of Canadian Univs. which distinguishes them from the typical Univs. of the United States is the provision made for the ambitious student and the student who wishes to specialize during his course for the B.A. degree. This is accomplished by the provision of the system of Honour courses. In this system a student who shows the necessary aptitude is permitted to take special classes, which in some instances are in extension of the regular classes, and in other cases are restricted to Honour students. In some Univs. the Honour classes are confined to the third and fourth years of the course; in others, as in the case of Toronto, they are given in all four years, and there is also a special Honour matriculation. In general, also, the number of prescribed classes is reduced, so that the student not only goes more deeply into each subject, but specializes to a greater extent than the Pass man is allowed to do. On the completion of an Honour course the student receives a degree With Honours. No small measure of the academic

success of Canadian students in post-graduate work in home and foreign Univs. is to be attributed to this system.

**LENGTH OF SESSION.** The Canadian Univs. open about October 1, and close in May or early in June. The average length of the session is  $32\frac{1}{2}$  weeks for all faculties, except those of Medicine and Dentistry, which are 4 weeks longer. Of the  $32\frac{1}{2}$  weeks, 26 are given up to actual lecturing, and the remainder to vacations, examinations, and closing exercises.

**LENGTH OF COURSE FOR A DEGREE.** For a degree in Arts, Pure Science, Applied Science, or Dentistry, the course extends over four years. For Medicine it was five years until the present time; it has now been extended to six. The course in Law proper extends over three years only; Dalhousie, however, requires a preliminary year in Arts and will soon extend this to two years.

By a proper combination of studies a student can complete a combined course for the degrees in Arts and a professional faculty in a year less than the sum of the years required for each.

#### SCIENTIFIC AND INDUSTRIAL RESEARCH, v. Appendix XXIV.

**CONFERENCES.** The eighth conference of Canadian Univs. was held in 1922. Secretary—President W. C. Murray of the Univ. of Saskatchewan. The National Council of Education (v. p. 283) is holding a conference in 1923.

#### DEGREES IN DIVINITY FOR STUDENTS BELONGING TO THE ANGLICAN CHURCH IN CANADA

The Church Universities and Theological Colleges in Canada having entered into an agreement to adopt a uniform standard for degrees in Divinity, all such degrees are now only conferred in accordance with Canon X of the General Synod of Canada, and only on examn. by a Joint Board, including the Archbishop of Rupert's Land (Chairman), and representatives of the Univs. of King's, Bishop's, and Trinity Colleges, Montreal Diocesan, Wycliffe (Toronto), Huron (London, Ont.), St. John's (Winnipeg), Emmanuel (Saskatoon), St. Chad's (Regina), Anglican Theol. Coll. of B.C.

In the case of a College within the "Province of Canada" (a group of dioceses in Eastern Canada) which has not the power to confer degrees the Metropolitan, or a representative of the College acting for him, confers the degrees. The Canon provides for similar powers being conferred on the Primate for the granting of degrees throughout the jurisdiction of the General Synod. [*Contributed by the Bishop of Ottawa.*]

#### NOVA SCOTIA TECHNICAL COLLEGE, HALIFAX

This institution represents the principal effort of the province in University training. It is supported entirely from provincial revenues. Through a co-operative agreement, a uniform matriculation and a uniform engineering course covering the general work of the freshman and sophomore years is carried out entirely in the Univs. of Acadia, Dalhousie, King's, Mount Allison, St. Francis Xavier, and St. Mary's College. On successful completion of this course, the student proceeds to the Technical College without examn. for the professional work of the last 2 of the 4 yrs.' course. Here the studies are



differentiated and the student elects either Civ., Elec., Mech., or Mining Engineering. The degree given is that of B.Sc. The Technical Coll. confines its attention entirely to the work of the jun. and sen. yrs. It is equipped principally for teaching the engineering courses and commercial testing of industrial materials and natural resources, and incidentally for scientific research. The buildings and equipment represent a provincial investment of about \$500,000. [*Contributed by the Department of Technical Educn., N.S.*]

#### THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

The object of the Foundation is to provide retiring allowances and pensions, and, "in general, to do and perform all things necessary to encourage, uphold, and dignify the profession of the teacher and the cause of higher education." Its 16th Annual Report, dated Oct. 1921, stated that the following classes of persons are eligible for retiring allowances: (1) A person in an institution on the associated list who (a) is 65 years of age and has served not less than 15 years as professor, or not less than 25 years as instructor or as prof. and instr., or (b) has served 25 years as prof. or 30 years as instr. or as prof. and instr., and who is shown by medical examn. to be entirely unfitted by disability for continuing the work of teacher; (2) a widow who has for 10 years been the wife of any teacher of class (a) or (b). The offices of the Foundation are at 522 Fifth Avenue, New York City.

The list of associated institutions includes DALHOUSIE, MCGILL, QUEEN'S, and TORONTO. Up to June 1921, 957 allowances had been granted, including 48 in Canada and 3 in Newfoundland.

In addition to its work in connexion with the payment of pensions the Board of Trustees has undertaken the issue of various publications and their free distribution. The Annual Reports include discussions of various questions connected with teaching institutions. Separate bulletins have been published on Financial Reports of Colleges, Univs., and Tech. Schools; Medical, Engineering, Legal, and other vocational education; the Training of Teachers; Teachers' Pensions; Higher Education in the *Maritime Provinces of Canada*.

In Oct. and Nov. 1922 two experts commissioned by the Foundation—Dr. Learned of its own staff and President Sills of Bowdoin College—visited the maritime provinces of eastern Canada with the view of suggesting a constructive policy in regard to the universities which had applied to it for aid. The commissioners reported in favour of bringing together into a single univ. at Halifax, which would include Dalhousie as one of its colleges, the other five univs. The cost of the scheme is estimated at 4½ million dollars.

#### CANADIAN STUDENTS IN THE UNIVERSITIES OF THE UNITED KINGDOM, v. Appendix XXII.

THE NATIONAL COUNCIL OF EDUCATION, Winnipeg, formed at a conference on Education in relation to Citizenship in 1919, has developed, with the co-operation of Univs. and Departments of Education a Bureau of Education, and is organizing, with the approval of the Univs., a series of National Lectureships under the title of a National "Extension University." It is to hold a conference in Toronto at Easter 1923.

# ACADIA UNIVERSITY, WOLFVILLE, NOVA SCOTIA

PRESIDENT—.....

CHAIRMAN OF THE BOARD OF GOVERNORS—J. W. MANNING, D.D.

REGISTRAR—Prof. A. B. BALCOM, B.Sc., M.A.

BURSAR—A. COHOON, B.A., D.D.

LIBRARIAN—MARY K. INGRAHAM, M.A.

## PROFESSORS, LECTURERS, ETC., October 1922.

<i>Biology</i>	[C. F. Myers Prof.	<i>Law</i>	
Perry, H. G., M.A. Harv.		.....	Lectr.
<i>Chemistry</i>		<i>Library Science</i>	[Instr.
Hill, D. U., M.A., Ph.D. Yale Prof.		Ingraham, Mary Kinley, M.A.	
<i>Classics</i>		<i>Mathematics</i>	[White Prof.
Thompson, W. H., jun., M.A.,		Coit, W. A., M.A., Ph.D. Boston	
Ph.D. Yale Barss Prof.			
<i>Economic Science</i>	[Prof.	<i>New Test. Lang. and Lit.</i>	
Balcom, A. B., B.Sc., M.A. Harv.		De Wolfe, H. T., B.A., D.D. Prof.	
<i>Education &amp; Psychology</i>	[Instr.	<i>Old Test. Lang. and Lit.</i>	
Kellog, C. E., M.A., Ph.D. Harv.		.....	G. P. Payzant Prof.
Borden, K. Instr.		<i>Oratory</i>	
<i>Engineering</i>	[I. Curry Prof.	.....	Instr.
Wheelock, F. E., M.A., Ph.D. Yale		<i>Osteology and Physiology</i>	
Sutherland, A., B.Sc. Prof.		De Witt, C. E. A., B.A., M.D.	
		McGill	Instr.
<i>English Lang. and Lit.</i>		<i>Physical Training</i>	
Rhodenizer, V. B., M.A., Ph.D.		Russell, C. B.	Director.
Harv. Prof.		<i>Physics</i>	[Alumni Prof.
Logan, J. D., Ph.D. Harv.		Haley, F. R., M.A. Harv.	
Spl. Lectr. in Canadian Lit.		<i>Romance Languages</i>	
<i>Geology</i>	[Prof.	.....	Prof.
Rau, W. M., B.Sc., M.A. Harv.		<i>Social Service</i>	[Instr.
<i>German</i>		White, Edith M., B.A. Holyoke	
Ross, Roy, M.A. Yale Prof.		<i>Theology and Church Hist.</i>	
<i>History</i>		Spidle, S., B.D., Ph.D. Clark	
Rogers, N. M'L., B.A., B.Litt.,		G. P. Payzant Prof.	
B.C.L. (Ox.) M. Curry Prof.			

## GENERAL INFORMATION (v. also p. 280).

Founded in 1838 by the N.S. Baptist Educational Society, Acadia College was incorporated in 1840 by Act of the N.S. Legislature, with the powers of a University. In 1896 an endowment of \$100,000 for the Theol. Dept. was received under the will of G. P. Payzant. The Board of Governors is appointed by the Baptist Convention of the Maritime Provinces, but the students are subject to no religious tests.

LIBRARY: 45,000 vols. MUSEUMS: Biol., Ethnol., Geol., Hist. LABORATORIES: Biol., Chem., Geol., Physics, Engineering. OBSERVATORY: Meteor. and Astron.

DEPARTMENTS. Arts and Sciences, Theology, Applied Science, Music.

DEGREE COURSES. 4 yrs.—B.A., B.Sc.; 3 yrs.—B.Mus., and for ordained ministers or licentiates of some Christian Church who have completed the first 2 yrs. of the Arts course, B.Th.; 1 yr. (for resident graduates)—M.A. Combined B.A. and B.Th.—6 yrs. The B.Sc. Engineering courses enable graduates to enter the 3rd year classes of McGill Univ. and N.S. Tech. Coll. Some of the B.A. and B.Sc. courses enable graduates to enter the 2nd yr. of the Dalhousie Law School, Halifax, and the Med. Dept. of McGill Univ. respectively (v. pp. 283, 301, 314).

OTHER COURSES. "English" Theol. (2 yrs.); Applied Sc. (2 yrs.), covering same ground as Unified course at McGill and the N.S. Tech. Coll., and giving admission to the 3rd yr. courses therein (v. p. 283).

FEES for tuition: in Arts and Sc., \$306; in Theol. *nil*; in Appl. Sc. (2 yrs.), \$220. Lab. fees extra, about \$30.

RESIDENCE. College hostels provide accommodation for 70 men and 65 women.

AFFILIATION, v. p. 314.

PUBLICATIONS. *Bulletin*, 25 cents p.a.; *Calendar*, number issued in July.

## THE YEAR 1921-22

NUMBER OF STUDENTS, 1921-22. Preparing for B.A., 209; B.Sc., 40; Dept. of Theology, 4; Applied Science, 33; Special, 16; Grads., 5. Total, 307.

HONORARY DEGREES CONFERRED. *D.D.*—Rev. S. S. Poole, Rev. C. W. Rose, Rev. E. H. Ramsay; *D.C.L.*—Mr. Justice T. S. Rogers, Hon. E. N. Rhodes, P.C., H. S. Ross; *D.Litt.*—J. D. Logan.

OTHER DEGREES. M.A., 3; B.A., 44; B.Sc., 10.

# UNIVERSITY OF ALBERTA

VISITOR—THE LIEUTENANT-GOVERNOR OF THE PROVINCE.

CHANCELLOR—HON. CHARLES ALLAN STUART, B.A., LL.D. Tor.

CHAIRMAN OF BOARD OF GOVERNORS—HON. H. HARVEY, M.A., LL.B. Tor., LL.D., Chief Justice.

PRESIDENT—HENRY MARSHALL TORY, M.A., D.Sc., LL.D. McG.

REGISTRAR—C. E. RACE, B.A. Tor., C.A.

LIBRARIAN—D. E. CAMERON, M.A. Edin.

## PROFESSORS, LECTURERS, ETC., October 11, 1922

<i>Accountancy</i>	Minnish, N. J., M.D. Manit.	
Race, C. E., B.A. Tor., C.A. Lectr.		Lectr.
<i>Agriculture</i> , v. also Vet.	8 Demrs. and 2 Instrs.	
Howes, E. A., B.S.A. Tor.	<i>Architecture</i>	
Dean of Faculty.	Burgess, C. S., A.R.I.B.A. Prof.	
Smith, J. MacG., B.S.A. Man.	<i>Bacteriology</i> , v. Med.	
Prof. of Ag. Engineering.	<i>Bio-Chemistry</i>	[Prof.
Sackville, J. P., B.S.A. Tor.	Collip, J. B., M.A., Ph.D. Tor.	
Prof. of Animal Husby.	Lochhead, G., B.A., M.Sc. McG.,	
Sinclair, R. D., B.S.A.	Ph.D. Leip.	Lectr.
Asst. Prof. of Animal Husby.	<i>Botany</i>	[Prof.
Bowstead, J. E., M.S.A. Wisc.	Lewis, F. J., D.Sc. Liv., F.L.S.	
Asst. Prof. of Animal Husby.	Moss, E. H., M.A. Tor.	Lectr.
Marker, C. P. Prof. of Dairying.	<i>Chemistry</i>	
Cutler, G. H., B.S.A. Tor.	Lehmann, A. L. F., B.S.A. Tor.,	
Prof. of Field Husby.	Ph.D. Leip.	Prof.
Newton, R., B.S.A. McG., M.S.	Walker, O. J., B.A. Sask., M.A.	
Minn. Prof. of Field Husby.	Harv., Ph.D. McG. Asst. Prof.	
Fryer, J. R., M.A. Tor.	Bridgeman, O. C., M.A. Sask.	
Asst. Prof. of Field Husby.		Lectr.
Strickland, E. H., M.Sc. Harv.	Sandin, R., M.Sc.	Lectr.
Prof. of Entomology.	Stover, N. McK., M.Sc.	Instr.
Harcourt, G., B.S.A. Tor.	5 Demrs.	
Lectr. in Hortic.	<i>Classics</i>	
Wyatt, F. A., B.S.A. Utah, M.S.,	Alexander, W. H., M.A. Tor.,	
Ph.D. Ill. Prof. of Soils.	Ph.D. Calif.	Prof.
Newton, J. D., B.S.A. McG.,	Misener, Geneva, M.A. Qu., Ph.D.	
Ph.D. Calif.	Chic.	Assoc. Prof.
Asst. Prof. of Soils.	Hardy, W. G., M.A. Tor., Ph.D.	
<i>Anatomy</i>	Chic.	Asst. Prof.
Revell, D. G., B.A., M.B. Tor.	Laycock, S. R., B.A. Tor., M.A.,	
Shaner, R. F., Ph.D. Harv.	B.D.	Instr.
Asst. Prof.		

*Dentistry* [Instr. (Op. D.).  
Bulyea, H. E., D.M.D. Harv.  
Gilchrist, H. A., D.D.S. Northwn.  
Instr. (Prosth.D.).

*Drawing & Descr. Geom.*  
Adam, J., M.A. Assoc. Prof.

*Economics*, v. Pol. Econ.

*Engineering, Civil & Municipal*  
Wilson, R. S. L., B.Sc. McG. Prof.  
Morrison, I. F., S.B. M.I.T.  
Prof. of Applied Mechanics.  
Webb, H. R., M.Sc. Lectr.

*Engineering, Mechanical*  
Robb, C. A., B.Sc. McG., M.S.  
Mass. Inst. Tech. Prof.

*English*  
Broadus, E. K., M.A. Chic., Ph.D.  
Harv. Prof.  
Gordon, R. K., B.A. Ox., M.A.,  
Ph.D. Tor. Prof.  
Salter, F. M., B.A. Dal., A.M.  
Chic. Lectr.  
Jones, J. T., B.A. Instr.

*French and Ger.*, v. Mod. Langs.

*Geology*  
Allan, J. A., M.Sc. McG., Ph.D.  
Mass. Inst. Tech. Prof.  
Warren, P. S., B.A. Tor., A.R.C.S.  
Lond. Lectr.  
Stover, Mrs. L. U., M.Sc. Asst.  
Sanderson, J. O. G., B.Sc. Asst.

*Hebrew*  
Miller, A. D., M.A. Tor., B.D.  
Vict. Lectr.

*History* [Prof.  
Burt, A. L., B.A. Tor., M.A. Ox.  
Long, M. H., B.A. Ox. Asst. Prof.  
Allwork, C. T., B.A. Asst.

*Household Economics*  
Patrick, Mabel, B.A. Tor. Lectr.  
Deadman, Edith, B.A. Tor. Instr.  
Gladstone, G., B.Sc. Ed. Virg.  
Instr.

*Law*  
Weir, J. A., B.A., LL.B. Sask.,  
B.A. Ox. Assoc. Prof.

Kleuen, V. E., LL.B. Sask., B.C.L.  
Ox. Lectr.  
18 Sessional Lectrs. at Edmonton  
and Calgary.

*Mathematics*  
Sheldon, E. W., M.A. McG., Ph.D.  
Yale Prof.  
Killam, S. D., M.A. Mt. All., Ph.D.  
Gött. Prof.  
Campbell, J. W., M.A. Qu., Ph.D.  
Chic. Assoc. Prof.  
Milne, T. H., M.A. Tor. Lectr.  
Mitchell, Mrs. E. T., M.Sc. Instr.

*Medicine*, v. *infra*

*Mining Engineering*,  
Pitcher, N. C., M.Sc. McG. Prof.  
Cameron, A. E., M.Sc. McG.  
Assoc. Prof.

*Modern Languages*  
Kerr, W. A. R., M.A. Tor., Ph.D.  
Harv. Prof.  
Coar, J. F., M.A., Ph.D. Harv.  
(German) Prof.  
Sonet, E., B. ès L. Lyons (French)  
Assoc. Prof.  
Pelluet, A. P. (French) Asst. Prof.  
Owen, F., M.A. Tor. Lectr.  
de Savoye, H., B. ès L. Paris, LL.B.  
(French) Lectr.

*Philosophy*  
MacEachran, J. M., M.A. Qu.,  
Ph.D. Leip. Prof.  
MacDonald, J., M.A. Edin.  
Asst. Prof.  
MacPhee, E. D., M.A., Ed.B.  
Edin. Lectr.

*Physics* [Prof.  
Boyle, R. W., M.A., Ph.D. McG.  
Smith, S., M.A., B.Sc. Ox.  
Assoc. Prof.  
MacLeod, H. J., B.Sc. McG.,  
M.A., Ph.D. Harv., M.Sc.  
Assoc. Prof.  
Nichols, L. H., B.A. McG. Lectr.  
Morgan, S. C., B.Sc. Qu. Lectr.

*Physiology and Pharmacology*

Downs, A. W., M.A. Phila., M.D.

Penns., D.Sc. McG. Prof.

Eddy, N. B., M.D. Corn.

Asst. Prof. of Physiol.

*Political Economy*

MacGibbon, D. A., M.A. McM.,

Ph.D. Chic. Prof.

McGoun, A. F., B.A., B.C.L. McG.,

M.A. Harv. Asst. Prof.

*Veterinary Science*

Talbot, P. R., V.S. Tor., M.D.V.

Chic. Specul. Lectr.

*Zoology*

[Assoc. Prof.]

Rowan, W., M.Sc. Lond., F.Z.S.

Harkness, W. J. K., B.A. Tor.

Instr.

**Medicine** (for subjects of first2 yrs.—Anat., etc., v. *supra*)*Bacteriology and Hygiene*

Rankin, A. C., C.M.G., M.D.,

C.M., D.P.H. McG., L.R.C.P.,

M.R.C.S. (Dean of Fac.) Prof.

Shaw, R. M., B.A., M.D., C.M.,

D.P.H. McG. Asst. Prof. of B.

Laidlaw, W. C., M.B. Tor. Lectr.

Orr, H., O.B.E., M.B., D.P.H.

Tor. Instr.

*Medicine, Clinical*

Jamieson, H. C., M.B. Tor. Lectr.

3 Demrs.

*Pathology*

Ower, J. J., B.A., M.D., C.M.

McG., Prof., and Provincial

Serologist.

Hall, M. E., B.A., M.B. Tor.

Demr.

*Pharmacology*, v. also *Physiol.*

Bell, I. R., B.A., M.B. Tor. Lectr.

*Pharmacy and Mat. Med.* [Prof.]

Gaetz, H. H., Director of School,

Dunn, F. A. S., Ph.C. Tor., M.P.S.

Gr. Bn. Asst. Prof. of Phm.

*Surgery*

Mewburn, F. H., M.D., C.M.,

LL.D. McG. Prof.

Gray, G. C., M.B. Tor. Lectr.

Munroe, A. R., M.D., C.M. McG.

Instr.

Wilson, W. A., M.D., C.M. McG.

Instr.

**Industrial Laboratories**

Kelso, J. A., M.Sc. Qu. Director.

Scroggie, A. G., B.Sc. Asst.

**Industrial Research Profs.**

Stansfield, E., M.Sc. Manc.

(Fuels.).

Clark, K. A., M.A. McM., Ph.D.

Ill. (Road Materials.).

**Physical Education**

..... Director.

Bakewell, E., B.A. Asst. Dir.

**Correspondence Courses**

MacKenzie, D. S. Director.

3 Instrs.

**Department of Extension**

Ottewell, A. E., M.A. Director.

Corbett, E. A., M.A. McG. Secy.

Montgomery, Jessie, B.A. Libn.

Paton, H. S., B.A. Tor., M.A.

Harv. Lectr. in Pol. Econ.

**AFFILIATED COLLEGES**

(1) ALBERTA THEOLOGICAL COLLEGE (Methodist), Edmonton. Chairman of Board of Governors, H. B. Smith, M.D.; Secy., C. E. Race, B.A., C.A. Principal—A. S. Tuttle, M.A., D.D. Mt. All., Prof. of Philos. of Religion. Other Profs.: A. D. Miller, M.A. Tor., B.D. Vict., Hebrew, etc.; Cloy Jackson, M.A. Tor., B.D. Vict., New Test. Lit. Five Lectrs. Situated on Univ. grounds; quarters for 125 students.

(2) ROBERTSON THEOLOGICAL COLLEGE (Presbyterian), Edmonton. Chairman of Board of Management—W. Short, K.C. Principal—J. M. Millar,

M.A., B.D., D.D., Prof. of Engl. Bible, etc. Head of Extra-mural Dept. and Lectr.—A. T. Barnard, M.A., B.D.

(3) ST. AIDAN'S COLLEGE and Hostel (C. of E.), Edmonton—affiliated, 1919. Warden—Rt. Rev. Bishop Gray.

(1) and (2) co-operate, Profs. of both instructing joint classes.

## GENERAL INFORMATION (v. also p. 280)

Telegraphic address—VERA (A.B.C. Code)

The University, created by act of the Provincial Legislature, 1906, originally consisted of a Chancellor, Vice-Chancellor, Senate, and Convocation. By amendment the office of President was created 1907, and a Board of Governors 1910, the latter being given financial and administrative control, while the Senate was restricted to educational supervision. Student residences, Athabasca, Assiniboia, and Pembina Halls, were opened in 1911, 1912, and 1914 respectively, while the main teaching and administrative building was completed in 1915. Classes began September 1908. In 1912 extension work, conducted from the beginning, was departmentalized under a Secretary. In the same year a Faculty of Law was created. Subsequent expansion involved the establishment of Faculties of Applied Science and of Medicine, 1913; Faculty of Agriculture, 1915; courses in Pharmacy and in Dentistry, 1914 and 1917 respectively; in Household Economics, 1918; in Commerce and in Public Health Nursing, 1921. In 1919-20 the extraordinary increase in the number of medical students necessitated the construction of a new Medical Building. In the same session the creation of the office of Director of the School of Pharmacy completed the evolution of the School from a Department under the Faculty of Medicine to an independent unit. The Provincial Legislature has established a close relationship between the Univ. and the Professions, and the Senate now has jurisdiction over the educational standards of Architects, Chartered Accountants, Dentists, Engineers, Land Surveyors, Lawyers, Pharmacists, Physicians and Surgeons, Registered Nurses, Optometrists, and Veterinary Surgeons.

The University grounds, 637 acres, beautifully situated on the wooded south bank of the Saskatchewan, include provision for the accommodation of affiliated colleges and afford ample room for expansion. Edmonton is a city of about 60,000 inhabitants, the capital of the Province of Alberta (area 250,000 sq. m.; pop. 600,000). The chief activities of the city are wholesaling, coal-mining, and meat-packing, while the main interests of the Province are agriculture and coal-mining. For 2000 miles to the north of Edmonton, and naturally tributary to it, lie the valleys of the Athabasca, the Peace, and the Mackenzie Rivers. The fur trade is still the chief activity of this vast region, though on the Peace River a rapid agricultural growth is in progress, and its great resources in coal, water-power, natural gas, lumber, asphalt, etc., await development.

LIBRARY, 19,000 vols. LABORATORIES for all scientific courses; museum; herbarium; farm; agricultural experimental plots.

FACULTIES. Arts and Sciences (including Household Economics, Pharmacy and Commerce); Applied Science (including Architecture); Medicine (including Dentistry); Law; Agriculture.

MATRICULATION exams. are conducted in April, June, and Sept., under control of High School and Univ. Matricn. Exams. Board of the Province. Equivalent exams. by recognized authorities in the British Dominions are accepted *pro tanto* for admission.

DEGREE COURSES. 4 yrs.—B.A., B.Sc. in Arts, B.Com., B.Sc. in Household Ec., in Engin. (Civ., Elec., or Mining), in Archt., or in Pharmacy, LL.B., D.D.S. (first 2 yrs. provided here, after which students are admitted to McG., or Tor. without further examn. for completion of course); 3 yrs.—B.H.E. (in Household Econ.), B.Sc. in Agric.; 6 yrs. (5 for returned soldiers)—M.D. (4 yrs. provided here, after which students are admitted to McG. or Tor. for completion). Combined B.A. and B.Sc. in Arts—6 yrs.; B.A. and B.Sc. in Applied Sc.—6 yrs.; B.A. and M.D.—8 yrs.; B.A. and LL.B.—6 yrs. (v. also pp. 237, 314). The Agric. course is preceded by preliminary training at one of the Provincial Agric. Schools.

A Bachelor may obtain the M.A. or M.Sc. by 1 yr. of advanced study or investigation or the B.Ed. by 2 yrs. of advanced study. The B.D. is open to B.A. students of affiliated Colls. on completion of approved courses. The LL.D. is honorary.

OTHER COURSES: For Licence in Pharmacy; Correspondence Courses for Teachers (Sennr. Matricn. subjects); Summer School for Teachers (conducted at the Univ. by Dept. of Educn.) together with selected courses in the Faculty of Arts; 3 mos.' course in P.H. Nursing for Registered nurses; Provincial Dairy School short courses.

A system of EXCHANGE LECTURES is carried on in co-operation with Manit. and Sask.

FEES, tuition per session: Arts (including 4 yrs.' degree courses in Pharm., Com. and Household Econ.), \$35; Appl. Sc., \$75 to \$100; Law, \$40; Med. and Dent., \$150 (1st yr., \$100); Acctcy, \$25 and \$50; Agric. (including 3 yrs.' course in Household Econ.), free. Students' Union, \$7; Med. Service, \$3.

SCHOLARSHIPS: several, particulars obtainable from Registrar. L. H. Bishop Memorial Fellowship in Engl. Lit., \$200, open to graduates of the Univ.

RESIDENCE, ETC. 4 Halls of residence (including 1 belonging to an affiliated Coll.), with accommodation for 525. Fees for room and board for the session, \$266; board only, \$26 per month. Social life is under supervision of Provost, a Univ. officer. All undergraduates are members of Students' Union.

UNIVERSITY EXTENSION work includes travelling and packet libraries and lantern slide and cinema services.

PUBLICATIONS. *Calendar* (June); *Press Bulletin*, weekly, by Dept. of Extension; *The Trail*, quarterly, by Alumni Asscn.; *The Gateway*, weekly, by students.

## THE YEAR 1921-22

BENEFACTIONS. Asscn. of Prof. Engineers, 3 Scholarships of \$100 each; Can. Inst. of Mining and Metall., \$40 for prizes; Laverenoye Club, Gold Medal in French; Sir J. A. M. Aikins, scholarship \$100 p.a. in Engl.; H. Stutchbury, \$25 for research in Appl. Sc.

NEW POSTS. Profs. of Applied Mechanics, Bio-Chem., Entomology, Surg.; Asst. Profs. of Anat., Pharmacy, Pol. Econ.; Instrs. in English, Bacteriology (3), Surgery (4); Asst. in History.

OTHER DEVELOPMENTS. Univ. took over Strathcona Hospl. and began extension of Hospl. building.



NUMBER OF STUDENTS. 1285, including 389 women. These figures include students in Arts and Sc., 666; Appl. Sc., 81; Med. and Dent., 222; Law, 143; Agr., 102; Phm., 44; Correspondence students, 123; summer school, 55.

HONORARY DEGREES CONFERRED. *LL.D.*—F. H. Mewburn, Most Rev. H. J. O'Leary, Baron Byng, F. W. Patterson.

OTHER DEGREES. *B.A.*—66 (including women, 32); *LL.B.*—23 (women, 1); *B.Sc.*—in Arts 14 (w. 8), in Phm. 3 (w. 2), in Civ. Eng. 3, in Min. Eng. 2, in Archit. 1, in Agric. 8; *M.A.*—13 (w. 2); *M.Sc.*—3; *Dipl. Phm.*—11; *Certif. Phm.*—4; *Certif. in Pub. Health Nursing*—8.

EXTENSION WORK. Lantern slides sent out, 1242; moving picture films, 295 series; lectures, 274; travelling libraries, 244. A University week for Farm Young People was held; also a short course in "Leadership."

## UNIVERSITY OF BISHOP'S COLLEGE, LENNOXVILLE, QUEBEC

CHANCELLOR—JOHN HAMILTON, M.A., D.C.L.

VICE-CHANCELLOR—Rev. A. H. MCGREER, O.B.E., M.A. Tor., B.A. Ox.,  
Principal of the College and Dean of Arts.

REGISTRAR—Capt. J. C. STEWART, Bursar and Secy. of the College.

### PROFESSORS AND LECTURERS, September 1922

Smith, Rocksborough R., M.A. Camb., B.A. Lond., Harold Prof. of  
Divinity, Dean of Divinity.

Boothroyd, E. E., M.A. Camb., Prof. of History and English Literature.

Burt, H. C., M.A., T.C. Tor., Prof. of Philos. and Econ., Lectr. in  
Church Hist.

Call, F. O., M.A., Prof. of Mod. Langs., and Librarian.

Hatcher, A. G., M.A. McGill, Prof. of Natural Science.

Rae, W. A., M.A. Tor., Hamilton Prof. of Classics.

Richardson, A. V., M.A. Camb., Prof. of Maths.

Vial, F. G., M.A., B.D., Warden of the Divinity House, Mountain Prof.  
of Past. Theol.

### GENERAL INFORMATION (v. also pp. 48, 280)

The College, founded in 1843, was in 1853 by Royal Charter constituted a University with power to confer degrees. It is administered by a Corporation consisting of the Anglican Bishops of the Province and Trustees and Council appointed by them jointly. The Bishops of Montreal and Quebec are President and Vice-President respectively of the Corporation and Visitors of the College.

The College provides ordinary and Honours courses for the B.A. degree, covering 3 yrs., and a 2 yrs.' course for the L.S.T. Divinity is a compulsory subject in each of the years of the ordinary course. Terms kept in other Univs. may be counted up to 2 yrs. Clergymen of the Dioceses of Quebec and Montreal may proceed to the B.A. by examns. without residence if of 6 yrs.' standing, and on a reduced period (1 or 2 yrs.) if of 4 or 2 yrs.' standing.

Examns. are conducted for degrees in Music.

FEES. For tuition, \$100 p.a.; board and furnished lodging with heating and lighting, \$300 p.a.

THE YEAR 1921-22. *Number of Students*: Divinity, 12; Arts, 63 (including 20 women). *Degrees conferred*: B.A., 15; M.A., 4; Mus.Bac., 1; L.S.T., 2. Hon. D.C.L.—The Bishop of Huron; F. H. Gisborne.

# THE UNIVERSITY OF BRITISH COLUMBIA, VANCOUVER

VISITOR—THE LIEUT.-GOVERNOR OF THE PROVINCE.

CHANCELLOR—R. E. McKECHNIE, M.D., C.M., F.A.C.S., LL.D.

PRESIDENT—LEONARD S. KLINCK, B.S.A. Tor., M.S.A., D.Sc. Ames.

REGISTRAR—S. W. MATHEWS, M.A. Qu.

LIBRARIAN—J. RIDINGTON.

## PROFESSORS, LECTURERS, ETC., October 27, 1922

### *Agriculture, v. infra*

#### *Bacteriology* [Prof.\*]

Mullin, R. H., B.A., M.B. Tor.

Coleman, R. E., M.B. Tor. Lectr.

1 Asst.

#### *Botany*

Hutchinson, A. H., M.A. McM.,

Ph.D. Chic. Prof.\*

Davidson, J., F.L.S. Asst. Prof.

Eastham, J. W., B.Sc. Edin.

Lectr. in Plant Path.

1 Asst.

#### *Chemistry*

Archibald, E. H., B.Sc. Dal., A.M.,

Ph.D. Harv. Prof.\*

Clark, R. H., M.A. Tor., Ph.D.

Leip. Prof.

Seyer, W. F., B.A., M.Sc. Alb.,

Ph.D. McG. Assoc. Prof.

Marshall, M. J., M.Sc. McG., Ph.D.

Mass. Inst. Tech. Asst. Prof.

8 Assts.

#### *Classics* [Prof.\*]

Robertson, L. F., M.A. McG.

Fodd, O. J., Ph.D. Harv.

Prof. of Greek.

Logan, H. T., B.A. McG., M.A.

Ox. Assoc. Prof.

1 Asst.

### *Dairying, v. Agric.*

### *Economics, Sociology, & Polit. Sc.*

Boggs, T. H., B.A. Ac., M.A.,

Ph.D. Yale Prof.\*

Angus, H. F., B.A. McG., B.C.L.,

M.A. Ox. Assoc. Prof.

Beckett, S. E., M.A. Qu.

Asst. Prof.

1 Asst.

### *Engineering, Civil, & Surveying*

Matheson, E. G., B.A.Sc. McG.,

M.E.I.C., M.Am.S.C.E.

Assoc. Prof.

Powell, W. H., B.Sc. McG. Lectr.

Lighthall, A., B.Sc. McG. Instr.

Irwin, G. M., B.Sc. McG. Instr.

Wilkie, F. A., B.A.Sc. McG. Lectr.

3 Assts.

### *Engineering, Mech. & Elec.*

..... Prof.\*

Ryan, C. C., M.Sc. McG.

Assoc. Prof. of M.E.

Archibald, H. P., B.A.Sc. McG.

Instr.

Napier-Hemy, H. J., R.C.N.

Lectr.

Ogilvie, H., B.A. Camb. Lectr.

Walkem, G., B.Sc. McG.

Special Lectr.

Coles, E. M., B.A.Sc. Instr.

7 Assts.

\* Head of Department.

*English*

Sedgewick, G. G., B.A. Dal., Ph.D.  
Harv. Prof.\*  
MacDonald, W. L., B.A. Tor., M.A.  
Wisc., Ph.D. Harv. Assoc. Prof.  
Wood, F. G. C., B.A. McG., A.M.  
Harv. Asst. Prof.  
Larsen, Thorleif, M.A. Tor., B.A.  
Ox. Asst. Prof.  
Walker, F. C., B.A. V.N.B., Ph.D.  
Harv. Asst. Prof.  
Bollert, Miss M. L., M.A. Tor.,  
A.M. Col. (Dean of Women)  
Asst. Prof.

4 Assts.

*Forestry*

Christie, H. R., F.E. Tor.  
Assoc. Prof.  
Knapp, F. M., B.S.F. Syracuse,  
M.S.F. Wash. Lectr.

*French, v. Mod. Langs.**Geology and Mineralogy*

Brock, R. W., M.A., LL.D. Qu.,  
F.G.S., Dean of Fac. Prof.\*  
Schofield, S. J., B.Sc. Qu., Ph.D.  
Mass. Inst. Tech. Prof.  
Uglow, W. L., M.A. Qu., B.Sc.  
Sch. Mi. Kingston, M.S.,  
Ph.D. Wisc.

Prof. of Mineralogy, etc.

Williams, M. Y., B.Sc. Qu., Ph.D.  
Yale Prof. of Palæont.

1 Asst.

*History*

[Prof.\*]  
Eastman, M., B.A. Tor., Ph.D. Col.  
Sage, W. N., B.A. Tor., M.A. Ox.  
Assoc. Prof.  
Soward, F. H., B.A. Tor., B.Litt.  
Ox. Instr.

*Horticulture, v. Agr.**Mathematics*

Buchanan, D., M.A. McM., Ph.D.  
Chic. Prof.\*  
Robinson, G. E., B.A. Dal.  
Assoc. Prof.

Richardson, L., B.Sc. Lond.

Asst. Prof.

Jordan, E. E., M.A. Dal.

Asst. Prof.

Hartley, B. S., M.A. Camb. Lectr.  
6 Assts.

*Mining and Metallurgy*

Turnbull, J. M., B.A.Sc. McG.

Prof.\*

Thomson, H. N., B.Sc. McG.  
Prof. of Met.

Gillies, G. A., M.Sc. McG.  
Assoc. Prof. of Mi.

1 Asst.

*Modern Languages*

Ashton, H., M.A. Camb., D.Lett.  
Univ. Paris, D.Litt. Birm.,  
O.I.P. Prof. of French.\*

Clark, A. F. B., B.A. Tor., Ph.D.  
Harv. Assoc. Prof. (French).

MacInnes, Isabel, M.A. Qu.  
Asst. Prof.

Grojean, G., L. ès L. et en Dr.  
Toul. Asst. Prof.

Ross, Margaret Instr. (French).

Greig, Janet, B.A. Qu.  
Instr. (French).

5 Assts. in French.

*Nursing*

Johns, Miss E. I., R.N. Asst. Prof.

*Philosophy*

Coleman, H. T. J., B.A. Tor.,  
Ph.D. Col., Dean of Fac.

Prof.\*

Henderson, J., M.A. Glas.  
Assoc. Prof.

*Physics*

Hebb, T. C., M.A., B.Sc. Dal.,  
Ph.D. Chic. Prof.\*

Davidson, J. G., B.A. Tor., Ph.D.  
Calif. Assoc. Prof.

Hennings, A. E., M.A. Lake  
Forest Coll., Ill., Ph.D. Chic.

Assoc. Prof.

1 Asst.

\* Head of Department.

*Public Health* [Red Cross Prof.\*  
Mullin, R. H., B.A., M.B. Tor.  
MacKenzie, Mary Ard, B.A. Tor.,  
R.N. Instr.

*Zoology*  
Fraser, C. McL., B.A. Tor., Ph.D.  
Iowa. Prof.  
Treherne, R. C., B.S.A. Tor.  
Lectr. in Econ. Entom., etc.  
Dunlop, N. A., B.A. Instr.  
1 Asst.

### Agriculture

*Agronomy*  
Boving, P. A., Cand. Phil. and  
Agr. (Sweden). Prof.\*  
Moe, G. G., B.S.A., M.Sc. McG.  
Assoc. Prof.  
1 Extension Asst.  
2 other Assts.

*Animal Husbandry*  
King, H. M., B.S.A. Guelph  
Assoc. Prof.  
Davis, R. L., B.S.A. Mont.,  
M.S.A. Ames. Asst. Prof.

Jones, Walter N., B.S.A. MacD.,  
M.S.A. I.S.C. Asst. Prof.  
1 Extension Asst.  
Jervis, J. G., V.S. Ont. Vet. Col.  
Lectr. in Vet. Sc.

*Dairying* [Prof.  
Sadler, W., B.S.A. MacD., M.Sc.  
McG., N.D.D. (Reading)  
Golding, N. S., N.D.D., B.S.A.  
Guelph Asst. Prof.  
1 Extension Asst.

*Horticulture*  
Clement, F. M., B.S.A. Guelph,  
Dean of Fac. Prof.\*  
Barss, A. F., A.B. Roch., B.S.Agr.  
Corn., M.S. Oreg. Ag. Coll.  
Assoc. Prof.  
Buck, F. E., B.S.A. McG.  
Asst. Prof.

1 Extension Asst.  
*Poultry Husbandry* [Assoc. Prof.  
Lloyd, E. A., B.S.A. Sask.  
Asmundsen, V. S., B.S.A. Sask.,  
M.S.A. Corn. Asst. Prof.  
1 Extension Asst.

\* Head of Department.

### AFFILIATED COLLEGES

VICTORIA COLLEGE, Victoria, B.C. Affiliated for 1st and 2nd years in Arts.  
Principal—E. B. Paul, M.A. Aberd., Assoc. Prof. of *Classics*. Other Profs.—  
E. H. Russell, B.A. Qu., *Maths.*; P. H. Elliot, M.Sc. McG., *Science*; Jeanette  
A. Cann, B.L. Dal., *Engl. and Philos.*; Mme. E. Sanderson-Mongin, *French*.  
WESTMINSTER HALL, Vancouver, B.C. (Theological)—W. H. Smith, M.A.,  
Ph.D., D.D. THE ANGLICAN THEOLOGICAL COLLEGE OF BRITISH COLUMBIA,  
Vancouver—Rev. W. H. Vance, M.A.

### GENERAL INFORMATION (v. also p. 280)

Telegraphic Address—UBRICO.

An Act of the Provincial Legislature was passed in 1890 establishing a University of British Columbia, but it lapsed in 1891. Vancouver High School was affiliated to McGill for the first year in Arts under the name of Vancouver College in 1899. In 1902 Victoria High School was similarly affiliated as Victoria College. In 1906 the Royal Institution for the Advancement of Learning of B.C. was incorporated and established, the McGill Univ. Coll. of B.C., taking over, by agreement, the Arts work of Vancouver College (extended in 1908 to include the 3rd yr. in Arts), and adding 2 yrs. of Applied Science. In 1907 Victoria College was incorporated in the Univ. Coll. The connexion with McGill was brought to a close in 1915, when the University of British Columbia, incorporated by an Act of 1908, and endowed with 2,000,000 acres of land, was opened, with provision for a complete course in Arts and 3 yrs. in Applied Science.

The Board of Governors consists of the Chancellor, elected by Convocation, President, and 9 nominees of the Lieut.-Govr. in Council. The Senate consists of the Minister of Educn., Chancellor, President (as Chairman), Deans, and 2 Profs. of each Faculty, 3 nominees of the Lieut.-Govr. in Council, Supt. of Educn., principals of normal schools, one member elected by high school principals and assts., one by Provl. Teachers' Inst., one by each affiliated Coll. or School in the Province, 15 by Convocation.

The University site consists of 540 acres on the headland of Point Grey, 300 feet above the sea. The Science building now under construction will cost \$600,000. The LIBRARY has 45,000 vols. and over 10,000 pamphlets, and regularly receives 400 periodicals. LABORATORIES available for all courses. A Forest Products Lab. (with two Olsen Universal Testing Machines of 200,000 and 30,000 lb. capacity respectively and one Hatt-Turner Impact Testing Machine) has been established by the Forestry branch of the Dept. of the Interior. HERBARIUM, 12,000 sheets native flora, 200 water colours B.C. Fungi. BOTANICAL GARDENS, Arboretum and economic section, 5 acres.

Students are ADMITTED as (1) undergraduates, by Matricn. examn. or its equivalent; (2) conditioned undergraduates, with a view to completing matricn. requirements during first year; (3) partial students. Every student is submitted to a physical examn. on entrance. Session 1923-24 begins Sept. 25.

DEGREE COURSES. B.A., 4 yrs. (3 from Senior matricn.). B.A.Sc. in Applied Science, 4 yrs. (following 1st yr. in Arts or Senr. matricn.). A degree course in nursing covers 5 yrs., including 2 yrs. of hospl. training. B.S.A., 4 yrs. from Junr. matricn. Double course, B.A. and B.A.Sc., 6 yrs. SHORT COURSES in Mining, 8 weeks, Jan.-March; in Agric. at the Univ. and elsewhere. Evening courses, with summer excursions, in Botany. Summer courses.

Work at OTHER UNIVERSITIES of a standard equivalent to that of this Univ. is accepted *pro tanto*.

FEES, inclusive, \$50 per session. Graduation, \$20.

FELLOWSHIP. \$200 awardable to graduate for further studies.

RESIDENCE. Board and lodging in vicinity of the College from \$40-50 p.m.

ADULT EDUCATION. Numerous lectures have been given under Univ. auspices in different centres in the province, but adult education has not yet been given the status of a Department. The selection of speakers and of subjects is made by a Standing Committee on Univ. Extension, which provides series of connected lectures throughout the winter. Short courses of 4 days duration have been conducted for a number of years with marked success. Present indications are that 3-yr. tutorial classes will not be organized in the Univ. for some time.

PUBLICATION. *Calendar* (April).

## THE YEAR 1921-22

NUMBER OF STUDENTS. In Arts and Science, 1st year, 335 (including women, 180), 2nd, 3rd, and 4th years, 358, graduates, 31; Applied Science—217 (women, 18, of whom 16 were taking courses in nursing); Agric.—69 (women, 5); graduates in Appl. Sc. and Agr.—7; Summer School—134; other short courses—83.

DEGREES. B.A.—77; B.A.Sc.—27; M.A.Sc.—1; B.S.A.—10; M.A.—9.

RESIGNATION. Prof. L. W. Gill, to accept Principalship of Hamilton Technical School.

# DALHOUSIE UNIVERSITY, HALIFAX, NOVA SCOTIA

CHAIRMAN OF THE BOARD OF GOVERNORS—GEORGE S. CAMPBELL,  
LL.D.

PRESIDENT OF THE UNIVERSITY—A. STANLEY MACKENZIE, Ph.D.,  
D.C.L., F.R.S.C.

REGISTRAR OF THE FACULTY OF ARTS—Prof. M. MACNEILL, M.A.

## PROFESSORS, LECTURERS, ETC., October 24, 1922

<i>Anatomy</i>	Kaulbach, E., C.A.	Lectr.
Cameron, J., M.D. Edin., D.Sc.	Wallace, Judge W. B.	Lectr.
St. And., M.R.C.S.	<i>Dentistry, v. infra</i>	
Campbell Prof.	<i>Economics</i>	[Asst. Prof.]
Demrs. :	Dawson, R. MacG., M.A.	
Campbell, J. G. D., M.D., C.M.	<i>Engineering, Civil</i>	
Atlee, H. B., M.D., C.M., F.R.C.S.	Copp, W. P., M.Sc. McG.	Prof.
Edin.	Theakston, H. R., S.B., E.M. N.S.	
Curry, W. A., M.D., C.M. McG.,		Tech. Asst.
F.R.C.S. Edin.	<i>English Lang. and Lit.</i>	
Grant, G. W., M.B. Edin., B.A.	MacMechan, A., B.A. Tor., Ph.D.	
<i>Archæology</i>	J.H.U., LL.D. Tor.	
Falconer, J. W., M.A. Edin., D.D.		Munro Prof.
Knox.	Bennet, C. L., B.A. N.Z.	Asst. Prof.
<i>Biblical Literature</i>	Todd, Mabel V.	Reader.
Kent, H. A., M.A.	<i>Geology</i>	[Asst. Prof.]
<i>Biology</i>	McIntosh, D. S., M.Sc. McG., B.A.	
[Assoc. Prof.]	<i>History</i>	[Assoc. Prof.]
Dawson, J. A., Ph.D. Yale	Wilson, E. E., M.A. Qu.	
Bell, H. P., M.Sc.	<i>Law, v. infra</i>	
<i>Chemistry</i>	<i>Mathematics</i>	
[Assoc. Prof.]	MacNeill, M., M.A. Harv.	Prof.
Nickerson, C. B., M.A. Clark	Warne, W. R., Ph.B. Syracuse	
King, H. S., A.B. Harv.		Asst. Prof.
Asst. Prof.	<i>Medicine and Surgery, v. infra</i>	
Todd, E. W., B.A.	<i>Modern Languages</i>	
<i>Classics</i>	Jones, H. P., B.A. Vind., Ph.D.	
Murray, H., B.A. Lond., LL.D.	Heid.	McLeod Prof.
Tor.	Mercer, C. H., M.A., B.Com.	
McLeod Prof.		Asst. Prof.
Nichols, E. W., Ph.D. J. Hopk.	<i>Commerce</i>	
Asst. Prof.	Hunt, B. C., B.B.A. Boston	Prof.
Logan, J. W., M.A.		
Lectr.		
Butler, G. K., M.A.		
Lectr.		

*Philosophy* [Munro Prof.  
Stewart, H. L., M.A. R.U.I. and  
Ox., Ph.D. R.U.I.

*Physics* [Munro Prof.  
Bronson, H. L., B.A., Ph.D. Yale  
Johnstone, J. H. L., Ph.D. Yale  
Assoc. Prof.  
Colpitt, Merle P., M.A. Instr.

*Physiology and Histology*  
Harris, D. Fraser, C.M., M.D.  
Glas., B.Sc. Lond., D.Sc.  
Birm. Prof.  
McLaren, P. D., M.D., C.M. Asst.  
Schwartz, H. W., M.D., C.M. Asst.  
Low, Margaret Demr.

*Political Science, Government and*  
Munro, H. F., M.A. Harv. Prof.

### Law

*Agency*  
Jenks, Stuart, LL.B., K.C., Deputy  
Attorney-General Lectr.

*Constit. and Internat. L.*  
MacRae, D. A., A.M., Ph.D. Corn.,  
B.A. Munro Prof.

*Contracts*  
Russell, Hon. Benjamin, M.A.,  
D.C.L. Mt. All.\* Prof.

*Contracts, Const. Hist., etc.*  
Smith, S. E., M.A. King's, LL.B.  
Instr.

*Crimes* [Lectr.  
O'Hearn, W. J., LL.B., K.C.

*Domestic Relations*  
Robertson, T. R., B.A., LL.B.,  
K.C. Lectr.

*Dominion Statutes* [Lectr.  
Yeoman, R. F., B.A., LL.B.

*Evidence, etc.*  
Patterson, G., M.A., LL.B.† Lectr.  
Mellish, H., B.A., LL.B.\* Lectr.

*Insurance* [Lectr.  
Allison, E. P., B.A., LL.B., K.C.

*Mortgages and Suretyship*  
Murphy, T. W., K.C. Lectr.

*Partnership*  
Bell, F. H., K.C. Lectr.

*Prac. Statutes and Interpn.*  
Macnutt, E. R., B.A.U.N.B.,  
LL.B. Lectr.

*Procedure and Property* [Prof.  
Read, J. E., B.C.L. Ox., B.A.

*Sales* [Lectr.  
Stewart, J. McG., B.A., LL.B.  
MacDonald, V. C., LL.B. Lectr.

*Shipping* [Lectr.  
Burchell, C. J., M.A., LL.B., K.C.

*Statutes*  
Rogers, T. S., B.A.Ac., K.C. Lectr.\*

*Torts*  
Wallace, W. B., LL.B.† Lectr.

*Medicine* (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Anæsthetics*  
Lessel, J. F., M.D., C.M. Demr.  
Muir, W. L., M.D., C.M. McG.  
Demr.

*Bact., v. Path. and Skin Dis.*

*Diseases of the Eye, etc.*  
Mathers, R. E., M.D. N.Y. Lectr.

*Gynæcology*  
Morton, C. S., M.D. Tor. Lectr.

*Hygiene*  
Prof. Hattie (v. Ment.) Lectr.  
Jost, A. C., M.D., C.M. McG.  
Lectr.  
Chisholm, H. A., M.D., C.M. McG.  
Lectr.

*Materia Medica*  
Burbidge, G. A., M.N.S. Phm.  
Soc. Demr.

*Medical Jurispr.*  
Churchill, J. L., M.D., C.M. McG.  
Lectr.

*Medicine and Clin. Med.*  
Silver, L. M., B.A. Vind., M.B.,  
C.M. Edin. Prof.  
MacKenzie, K. A., M.D., C.M.  
(Med.) Lectr.

\* Judge of the Supreme Court of N.S. † Judge of the County Court.



MacIntosh, G. A., M.D., C.M.  
Lectr.

Grant, H. G., M.D., C.M., M.R.C.S.,  
L.R.C.P. Lond. Lectr.

Sieniewicz, T. D., M.D., C.M. „  
Johnston, S. R., M.D., C.M. Lectr.

*Mental Diseases* [Prof.  
Hattie, W. H., M.D., C.M. McG.

Lawlor, F. E., M.D., C.M. McG.  
Demr.

*Obst. and Dis. of Women and  
Children*

..... Prof.  
Almon, W. B., M.D., C.M. (Obst.)  
Assoc. Prof.

Macdonald, P. A., M.D., C.M.  
McG. (Practical O.) Lectr.

Maclellan, E. K., M.D., C.M. „  
*Path. and Bacteriology*

Nicholls, A. G., M.A., M.D., C.M.,  
D.Sc. McG. Prof.

MacKenzie, D. J., M.D., C.M.  
Lectr.

Lyons, J. N., M.D., C.M.  
Demr. in B.

*Pediatrics*  
Carney, M. J., M.D., C.M. McG.,  
B.A. Lectr.

*Skin Diseases*  
Mack, F. G., M.B., C.M. Tor.  
(Demr. in Bact.) Lectr.

*Surgery and Clin. Surg.*  
Hogan, E. V., M.D., C.M. McG.,  
M.R.C.S. Eng., L.R.C.P.  
Lond. Prof.

Chisholm, M., M.D., C.M. McG.,  
L.R.C.P. Lond. (Clin.) Prof.

Murphy, G. H., M.D., C.M. Lectr.  
McDonald, H. K., M.D., C.M.  
McG. (Clin.) Prof.

Stewart, J., M.B., C.M., LL.D.  
Edin. (Surg.) Prof.

Weatherbe, P., M.B., Ch.B. Edin.  
(Op. Surg.) Lectr. & Demr.

McDougall, J. G., M.D., C.M.  
McG. (Clin.) Lectr.

Thomas, L., M.D., C.M., M.R.C.S.  
Eng., L.R.C.P. Lond. (Pract.  
Surg.) Demr.

*Therapeutics* [Lectr.  
Corston, J. R., B.A., M.D., C.M.

**Public Health Course for Nurses**  
Royer, B. F., M.D. Jeff. Director.  
Ross, Jessie L., R.N. Asst. Dir.

**Dentistry**  
*D. Anatomy*

Ritchie, S. G., B.A. N.B., D.M.D.  
T.D.C. Prof.

*Crown and Bridge Work, etc.*  
Thomson, G. K., D.D.S. P.D.C.  
Prof.

Oxner, W. C., D.D.S., B.C.D.S.  
Lectr.

*Dentistry*  
Bagnall, J. S., D.D.S. Instr.

*Exodontia and Radiology* [Lectr.  
Hennigar, G. R., D.D., B.C.D.S.

*Genl. and Oral Surg. and  
Anæsth.*

Woodbury, F. V., M.D., C.M. Dal.,  
L.R.C.S. and L.R.C.P. Edin.,  
L.F.P.S. Glas. Prof.

*History, Ethics, and Jurispr., v.  
Prosthetic*

*Materia Medica*  
Woodbury, K. F., D.D.S. Lectr.

*Operative D.*  
Ryan, F. W., D.D.S. Mich. Prof.  
Beckwith, W. H. H., D.D.S. Penn.  
Lectr.

*Orthodontia*  
Woodbury, W. W., B.Sc., D.D.S.  
P.D.C. Prof.

*D. Path. and Therap.*  
Cogswell, A. W., M.D., C.M. Hfx.,  
M.C., D.D.S. Penn. Prof.

Prof. Ryan Lectr.

*Prosthetic D.*  
..... Prof.

Woodbury, R. H., D.D.S. P.D.C.  
Lectr.

Fluck, G. H., D.D.S. P.D.C., Lectr.  
Faulkner, A. W., D.D.S. Lectr.

Gardner, O. Asst. Demr.

## AFFILIATED INSTITUTIONS

**PRESBYTERIAN COLLEGE, Halifax.** Classes and examns. in Hebrew, Gaelic, and New Testament Greek at the Coll. are recognized as qualifying for the B.A. Students may complete the Div. course at the Coll. and take the B.A. in 6 yrs.

**PRINCE OF WALES COLLEGE, Charlottetown, P.E.I.** Students holding certain certifs. of the Coll. are admitted to the 1st, 2nd, or 3rd yr. of the B.A. course.

**HALIFAX CONSERVATORY OF MUSIC.** Courses recognized for Mus.B. and Lic.Mus.

**MARITIME COLLEGE OF PHARMACY.** Courses recognized for B.Ph.m.

**MOUNT ST. VINCENT ACADEMY.** Recognized for Advanced Standing in Arts.

## GENERAL INFORMATION (v. also p. 280)

Dalhousie College, founded in 1818 by the Earl of Dalhousie, was in 1841 granted Univ. powers, but was closed in 1845 for want of sufficient funds. In 1863 it was reorganized and opened with a staff of 6 Professors. In 1877 the Faculty of Science was organized, and from 1879 development proceeded rapidly with the help of the benefactions of George Munro of New York (\$350,000), Alexr. McLeod of Halifax (\$65,000), and Sir Wm. Young (\$88,000). The Faculty of Law was established in 1883, the School of Mines in 1902. In 1911 the Halifax Medical College, into which the Faculty of Medicine (organized in 1868) had been merged, was acquired by the Univ., and the College of Pharmacy was established with its co-operation. In 1912 the work of the Maritime Dental College was taken over by the Univ. In this year \$400,000 was collected for a new site (40 acres) and buildings, etc., towards which Andrew Carnegie gave \$40,000. Further benefactions amounting to \$200,000 were received in 1915-18.

In connexion with centenary celebrations in 1919 subscriptions amounting to \$2,250,000 were obtained. One million of this was for Medical teaching and \$300,000 for a Women's Residence.

Appointments to the Board of Governors are made by the Govr.-in-Council on the nomination of the Board or on the nomination, with the approval of the Board, of individuals or bodies supporting chairs.

**LIBRARIES.** 50,000 vols. and 10,000 pamphlets. Access also to Science Library—61,000 vols. and pamphlets; Legislative—24,000 vols.; Theol.—11,000; Law—18,000. **MUSEUMS:** Ornith., Geol., Indian antiquities. Access to Provincial Museum of Geol., Mineral., Zool. **LABORATORIES:** Chem., Physical, Geol., Engin., Biol.

**FACULTIES.** Arts and Science (including Commerce, Music, Pharmacy, and Engineering); Law; Medicine; Dentistry.

**MATRICULATION** requirements are articulated to the High School system of the Province which covers the 4 last years of the Public School 12-year course. The compulsory subjects for admission to the B.A., Phm.B., and LL.B. courses are (1) English, (2) Maths., (3) Latin or Greek, (4) another foreign language, (5) History (British or Ancient), Physics, or Chem.; B.Sc. or B.Mus.—(1), (2), (5), French, German; M.D., C.M., or D.D.S.—(1), (2), (4), Latin, Brit. Hist., Physics, Chem.

The 4 Univs. of the Province hold an annual conference on the subject of Matricn.

DEGREE COURSES. 4 yrs.—B.A., B.Sc., B.Com., D.D.S.; 3 yrs.—LL.B., Mus.B.; 6 yrs.—M.D., C.M. (taken together); 1 yr. (following 4 yrs.' practical experience)—Phm.B.; the first 2 yrs. of the Engin. course (v. p. 283). A B.A. of one of the Univs. of N.S. or N. Bruns. who has taken Law subjects for part of his course may qualify for the LL.B. in 2 yrs. The M.D., C.M., and D.D.S. can be reached by concurrent courses in 7 yrs. The M.A. or M.Sc. is given on successful completion of an approved 1-yr. course of study by a B.A. or B.Sc., respectively, of an approved Univ. The course may be pursued by graduates of Dalhousie wholly or in part by private reading, attendance at the Univ. being optional for them (v. also pp. 228, 237).

DIPLOMA course for the Lic.Mus.—2 yrs. Music and Pharmacy courses are taken in the Affiliated Institutions, v. *supra*. A 6 mos.' course of training for Pub. Health work for trained nurses is provided.

FEES. For tuition, for each class (ex. lab. or draughting-room), \$18; lab. or draughting-room class, \$23.

RESIDENCE. Hostel for 60 women students, erected at a cost of \$300,000. Dormitories are provided also for men students.

PUBLICATIONS. *Calendar* (July); *Annual Report* (Sept.); *Gazette*, \$1.

## THE YEAR 1921-22

NEW BUILDINGS. Extension of Library completed. Arts Building completed and occupied (Dec. 1921). Future Arts Building commenced and partly constructed (used meanwhile for other purposes). Medical Science Laboratory and Out-patient Clinic under construction. Women's Residence near completion.

NUMBER OF STUDENTS. Preparing for B.A. or B.Sc. or B.Comm., 264; LL.B.—77; M.D.—173; D.D.S.—64. Total students, men, 546; women, 166. Students from outside Canada, 43.

DEGREES. B.A. or B.Sc.—44; LL.B.—23; M.D., C.M.—25; D.D.S.—8; M.A. or M.Sc.—10.

# UNIVERSITY OF KING'S COLLEGE, WINDSOR, NOVA SCOTIA

[Returns not received in 1922.]

PATRON—THE ARCHBISHOP OF CANTERBURY.

VISITOR—THE ARCHBISHOP OF NOVA SCOTIA.

CHANCELLOR—SIR CHAS. J. TOWNSHEND, M.A., D.C.L.

VICE-CHANCELLOR AND PRESIDENT—T. S. BOYLE, M.A., D.D.

REGISTRAR—T. H. HUNT, M.A., D.D.

## PROFESSORS AND LECTURERS, September 1921

<i>Chemistry and Physics</i>		<i>French</i>	
Sturley, A. A., M.A. Ox.	Prof.	Mason, E. M., B.A.	Lectr.
<i>Classics</i>		<i>German</i>	
Willets, C. E., M.A. Camb., D.C.L.	[Prof.]	Harley, H. A., M.A.	Lectr.
<i>Divinity</i>		<i>History and Economics</i>	
Vroom, Ven. Archdeacon F. W., M.A., D.D., D.C.L.	[Senr. Prof.]	The President	Prof. of H.
Hunt, T. H., M.A., D.D.		Judd, W. W., M.A.	Lectr. in E.
		<i>Law</i>	
Paterson-Smyth, C., M.A. Tor., B.D. (Past. Theol., etc.)	Alexandra Prof. Prof.	Martell, L. H., M.A., LL.B.	Lectr.
Hiltz, R. A., M.A. (Rel. Educn., etc.)	Prof.	<i>Mathematics</i>	
		Wadley, H. W. A., M.A. Camb.	Prof.
<i>Engineering</i>		<i>Modern Languages</i>	
Nixon, R. L., B.Sc.	Prof.	.....	Prof.
<i>English</i>		Miller, R. A., M.A.	Lectr.
MacFarlane, W. D., M.A. McG., Ph.D. Gött.	Prof.	<i>Philosophy and Ethics</i>	
Miller, R. A., M.A.	Lectr.	Kingston, G. F., M.A. Tor., B.D.	Prof.

## GENERAL INFORMATION (v. also p. 280)

Opened in 1790 and established with full Univ. powers by Royal Charter in 1802. Governed by a Board of 36 members, of whom 19 are elected by Rural Deaneries, 11 by Alumni, 4 by Diocesan Synods. The Archbishop of Nova Scotia is Visitor and President of the Board. The Bishop of Fredericton is Vice-President.

The College has 2 Professors of Divinity, Professors of English Literature, Mathematics, Modern Languages, Philosophy and Ethics, Science, and Physics

and Engineering, and Lecturers in Pastoral Theology and Homiletics, History, Law, Mathematics, Philosophy, and S.S. Methods.

A SCHOOL OF LAW in connexion with the College was established in St. John, N.B., in 1892. It has a staff of 14 lecturers.

The College is *affiliated* with Oxford, Cambridge, and Dublin.

The *Provincial Technical College* at Halifax admits to its 3rd year students who have taken the prescribed Science course and passed the appropriate examns. in King's, and such students, on passing the final examn. of the Technical College, may be admitted to the B.Sc. degree (v. p. 283).

Students from the *Jamaica Church Theological College* who, after a residence of 6 terms there, pass the required examns. in the subjects of the Divinity course at King's, may receive the diploma of L.S.T.; and Divinity students who have completed the required residence at the Jamaica College, and have passed the necessary examns. according to the requirements of King's, may be admitted to the degree of B.A.

THE YEAR 1920-21. *Benefactions*: Chief Justice Harris, £20,000; J. W. Allison, £5000; Anon. £6000. *Special events*: New Main Building cornerstone laid by Lieut.-Govr., May 12, 1920. Campaign opened to raise £200,000. *Number of students*: Arts and Science, 89; Div., 18; Law, 39. *Degrees conferred*: D.C.L. (Hon.), Prest. N. M. Butler of Columbia; Lieut.-Govr. Maccallum Grant; R. A. Hilz; R. W. Norwood; G. H. Bolt; E. M. Stires. B.A., 11; M.A., 7; B.D., 1; B.C.L., 9; D.Sc., 1.

# LAVAL UNIVERSITY, QUEBEC

VISITOR AND CHANCELLOR APOSTOLIC—H.E. Cardinal L. N. BÉGIN,  
Archbishop of Quebec.

RECTOR—Mgr. C. N. GARIÉPY, D.D., Sup. of the Seminary of Quebec.

SECRETARY OF THE UNIVERSITY AND MODERATOR—Prof. O. BERGERON,  
M. ès A.

## PROFESSORS, December 4, 1922

<i>Anatomy, v. Med.</i>		<i>French Language</i>	
<i>Astronomy, Practical</i>		Aubert, A.	Prof.
Smith, A. (Dir. of Quebec Obser- vatory)	Prof.	<i>French Literature</i>	
Simard, H., M.A., D.D.	Prof.	Roy, C., L. ès L., D.Ph.	Prof.
<i>Chemistry</i>		Gaillard du Champpris, D. ès. L.	Prof.
Fillion, Ph. J., M. ès A.	Prof.	Maheux, A., M.A. Prof. of Rhetoric	
<i>Chemistry, Analytical</i>		Laliberté, M., M.A.	
Garneau, Sir G., B. ès Sc.Ap., Ing.Civ., C.L.D'H.	Prof.	Prof. of Belles-Lettres.	
<i>Chemistry, Organic</i>		Morel, A., M.A.	Prof. of Belles-Lettres.
Cardinaux, P., D. ès Sc.	Prof.	<i>Geography</i>	
.....	Asst. Prof.	Garneau, A., M. ès A.	Prof.
<i>Classics</i>	[Prof.	<i>Geology and Mineralogy</i>	
Pelletier, F., M.A. (Greek Lit.)		Vachon, A., M.A., L.Phil.	Prof.
Croissant, L., M.A. (Greek Lang.)	Prof.	<i>Histology, v. Med.</i>	
Hébert, P., M.A. (Latin Lit.)	Prof.	<i>History (General)</i>	
LeBel, A., D. ès Lettres (Latin Lit.)	Prof.	Chapais, Hon. T., D.L., C.St.Gr., C.L.D'H.	Prof.
Levesque, R., M.A. (Latin Lit.)		Savard, G.,	Prof.
<i>Commerce, v. Law</i>	Prof.	<i>History of the Church</i>	
<i>Economics, v. Law and Soc.</i>		Roy, G., L.Ph., D.D.	Prof.
<i>Elocution</i>		<i>History of Canada and of the Church in Canada</i>	
Rivard, A., M.A., B. en Dr., D. ès L., K.St.Gr., K.C.	Prof.	Gosselin, Mgr., M.A.	Prof.
<i>English</i>		Genest, B. ès L.	Prof.
Cannon, W., B.A.	Prof.	<i>Law, v. infra</i>	
<i>Forestry</i>		<i>Mathematics</i>	
Piché, G. C., Ing.For.	Prof.	Tremblay, A.	Prof.
Bédard, A., Ing.For.	Prof.	Mercil, A., Ing.Civ., B. ès Sc.Ap.	Prof.
<i>Forest Law</i>		Bergeron, O., M. ès A.	Prof.
Richard, L. A., D. en Dr.	Prof.	<i>Medicine, v. infra</i>	

<i>Music</i>		<i>Commerc. and Marit. Law</i>	
Gagnon, G., Mus.D.	Prof.	Bernier, L. M. J. A., D. en Dr.,	
Lavigne, A., Mus.D.	Prof.	K.C.	Prof.
Vezina, J., Mus.D.	Prof.	Marchand, A., D. en Dr., K.C.	
Gilbert, J. A., Mus.D.	Prof.		Prof.
<i>Philosophy</i>		Gravel, J., D. en Dr., K.C.	Prof.
Benoit, R., D.Th., L.Ph.	Prof.	<i>Criminal L.</i>	
Robert, A., M.A., L. en Econ., D.D.	Prof.	Lachance, A., L. en D., Judge	[Prof.]
<i>Physics</i>		Fitzpatrick, Hon. Sir Chas.,	
Simard, H., M. ès A., D.Th.	Prof.	G.C.M.G., D. en Dr., P.C.C.,	
Christen, A., D. ès Sc.	Prof.	Lt.-Govr.	Prof.
<i>Physiology, v. Med.</i>		<i>History of L.</i>	
<i>Social and Political Econ.</i> [Prof.]		St. Laurent, L., D. en Dr.	Prof.
Prince, J. E., D. en Dr., K.C.		<i>International L.</i>	
<i>Surveying</i>		Rivard, A., M.A., D. ès L., D. en Dr.,	
Joncas, P., Ing.Civ., B. ès Sc.Ap.,		K.C.	Prof.
M.Can. Soc. C.E. (Building		<i>Municipal, L.</i>	
and S.)	Prof.	Prévost, J. A., D. en Dr., K.C.	[Prof.]
<i>Theology, v. also Hist.</i>		<i>Procedure, Civil</i>	
Paquet, Mgr. L. A., V.G., D.Th.,		Pouliot, A., D. en Dr.	Prof.
M.St.T.A.	Prof.	Baillargeon, E., D. en Dr., K.C.	
Nadeau, E., D.Th., L. en Dr. Can.			Prof.
	Prof.	<i>Roman L.</i>	
Gariépy, C. N., D.Th.	Prof.	Flynn, Hon. E. J., D. en Dr.*	Prof.
Gagnon, C., D.Th.	Prof.	Belleau, E., D. en Dr., K.C.	Prof.
Foy, C., Lic. en. Ph., D.Th.	Prof.	Desrivières, E., D. en Dr.	Prof.
Gignac, J., D.Th., D. en Dr. Can.		<i>Medicine</i>	
(Canon Law)	Prof.	<i>Anatomy, Descr.</i>	
Grandbois, J. E., L. en Ph., D.Th.		Dagneau, C., M.D.	Prof.
(Holy Script. and Orient.		<i>Anatomy, Pathological</i>	
Langs.)	Prof.	Vallée, A., M.D. (Dir. of P.A. and	
Robert, A., M.A., D.Th., D.Ph.,		Bact. Labs.)	Prof.
D.St.T.A., L.Sc. Louv.	Prof.	<i>Anat. and Oper. Med., Pract.</i>	
Langlois, A., D. en Phil. et en Th.		Pâquet, A., M.D.	Prof.
	Prof.	<i>Dermatology</i>	
<i>Zoology and Botany</i>		Mayrand, R., M.D.	Prof.
Robitaille, A., M.A.	Prof.	<i>Gynæcology and Gyn. Clin.</i>	
<i>Law</i>		Grondin, S., M.D., C.L.D'H., O.I.P.	
<i>Admin., Const., and Munic. L.</i>			Prof.
Sirois, J., D. en Dr.	Prof.	<i>Histology and Bact.</i>	
<i>Civil L.</i>		Hamel, A. C., M.D.	Prof.
Dorion, Hon. C. E., D. en Dr.,		<i>Hygiene, Public</i>	
K.C.*	Prof.	Paquin, R., M.D.	Prof.
Roy, F., D. en Dr., K.C., O.I.P.			
	Prof.		

\* Judge of the High Court.

<i>Laryngology</i>		<i>Path., Genl. and Clin. Med.</i>	
Fiset, L. J. N., M.D.	Prof.	Rousseau, A., M.D., O.A.	Prof.
Dussault, N. A., M.D. (Rhino-Lar., etc.)		<i>Path., Internal</i>	
	Prof.	Brochu, M. D., M.D., O.I.P.	Prof.
<i>Materia Medica</i>		<i>Pediatrics, Hygiene, etc.</i>	
Faucher, P. V., M.D.	Prof.	Fortier, E. R., M.D.	Prof.
Turcot, E., M.D.	Prof.	Jobin, A., B.A., M.D.	Prof.
<i>Ophthalmology</i>		<i>Physiol. and Clin. Med.</i>	
Pagé, J. D., M.D.	Prof.	Leclerc, O., M.D.	Prof.
<i>Ophth. and Ot. Clin., etc.</i>		<i>Therapeutics</i>	
Coote, P., M.D.	Prof.	Guérard, J., M.D.	Prof.
<i>Pathology, Ext. and Clin. Surg.</i>		<i>Toxicol., Leg. Med., etc.</i>	
Simard, E. T. A., M.D., O.I.P.	Prof.	Marois, A., M.D.	Prof.

## INSTITUTIONS ANNEXED OR AFFILIATED TO THE UNIVERSITY

["Annexion" implies merely approval by the Univ. of the programmes of study and, in some cases, nomination of some of the staff, diplomas being granted on reports presented by the Directors of the annexed institution. "Affiliation" or—in the case of an institution outside the province of Quebec—"agrégation" involves control by the Univ. of examinations.]

ÉCOLE D'ARPENTAGE ET DE GÉNIE FORESTIER (Surveying and Forestry). Founded by Govt. and annexed to the Faculty of Arts. Director, Avila Bédard, Prof. of Forestry. 11 other Profs.

ÉCOLE AGRICOLE DE STE. ANNE DE LA POCATIÈRE, affiliated. Director, Prof. N. Pelletier. 12 other Profs.

ÉCOLE SUPÉRIEURE DE CHIMIE. Annexed to the Faculty of Arts. Director, Prof. P. Cardinaux. 6 other Profs.

ÉCOLE NORMALE SUPÉRIEURE. Annexed to the Faculty of Arts. Director, Prof. F. Pelletier.

GRANDS SÉMINAIRES. (Pupils obtain the B. en Th. by passing a certain number of quarterly exams. in the Seminary.) Québec (comprising Theol. students under its jurisdiction or following its courses); Ste. Anne de la Pocatière (Coll. de Ste. Anne); Rimouski; Chicoutimi; Nicolet; Trois Rivières.

ENSEIGNEMENT SECONDAIRE MODERNE ET CLASSIQUE. Numerous institutions are affiliated to the Univ. under conditions providing for complete preparation for Inscription and the Baccalauréat.

## GENERAL INFORMATION (v. also p. 280)

The Univ. was founded by the Seminary of Quebec in 1852 under a Royal Charter. A general supervision of teaching and discipline is exercised by the Archbishop of Quebec as Visitor and Chancellor Apostolic and President of the Conseil Supérieur of Archbishops and Bishops of the Province. The Profs.



of the Faculty of Theology are nominated by the Visitor, those of other Faculties by the Conseil de l'Université, composed of the Directors of the Seminary of Quebec and 3 Senior Profs. of each Faculty.

LIBRARIES, 146,000 vols. MUSEUMS: Mineral., Geol., Bot., Zool., Ethnol., Relig., Paintings, Coins. LABORATORIES: Chem., Phys.

FACULTIES. Arts (with Schools of Surveying and Forestry, Chemistry and Training for Teachers annexed), Theology, Law, Medicine.

DEGREES AND DIPLOMAS. The Univ. perpetuates the stages by which a Degree was, and still is, reached in the Univ. of Paris. The Baccalauréat (B. ès A., etc.) is not the equivalent of any of the English Degrees, but is an official certificate (recognized by the Govt.) that the student has successfully completed his literary and scientific studies, and is entitled to begin his professional studies in law, medicine or applied science. It is obtained before he leaves the affiliated Institute, Seminary or College at which he has studied. Students who reach a certain standard in both Letters and Sciences obtain the B. ès A.; those who reach this standard in either and a certain lower standard in the other obtain the B. ès L. or B. ès Sc. The course for the Licence covers 2 yrs. in Philos. (L. en Ph.) or Letters (L. ès L.); 3 yrs. in Theol. or Law (L. en Th. or Dr.). To obtain the D. en Ph. or D. en Dr. it is necessary to support successfully in public a thesis and propositions as in other French Univs. The D. en Th. and D. en M. or M.D. are granted after examn.

The complete medical course formerly lasted only 4 yrs., but since Jan. 1909 has, in accordance with the regns. of the Provincial Coll. of Phys. and Surgns., been framed so as to cover 5 yrs. The Baccalauréat, however, may be taken on the completion of 2 yrs. The Doctorat gives admission to the examn. for the Diploma of M.R.C.S. Lond. Inscription in Arts is recognized as corresponding to the Prelim. examn. of the R.C.S. Lond. The examns. for the Dipl. of Hygiéniste expert may be taken by a D. en M. after a 6 mos.' course.

The Diploma in Forestry or Bachelorship in Surveying implies 4 yrs.' study in the Sch. of Surveying and Forestry.

The new École de Chimie provides a 4 yrs.' course leading to a Licence and to a Doctorate in Chemistry.

RECOGNITION of the B. ès A. of Laval is accorded by the Univs. of Rome, of France and of Louvain, and by Canadian Univs., and some of those of the U.S.A. (v. also p. 237).

FEES for tuition, \$100 to \$150 p.a.

## THE YEAR 1921-22

NUMBER OF STUDENTS. Arts, 887 (including 855 in affiliated seminaries and Colleges); Theol., 178; Med., 160; Law, 81; Annexed Schools, 175; Total, 1481.

# McGILL UNIVERSITY, MONTREAL

VISITOR—THE GOVERNOR-GENERAL OF CANADA.

PRESIDENT OF THE BOARD OF GOVERNORS AND *ex officio* CHANCELLOR—

E. W. BEATTY, B.A., K.C.

PRINCIPAL AND VICE-CHANCELLOR—SIR ARTHUR W. CURRIE, G.C.M.G.,  
K.C.B., LL.D.

SECRETARY AND BURSAR—A. P. S. GLASSCO, B.Sc.

REGISTRAR—J. A. NICHOLSON, M.A., LL.D.

LIBRARIAN—G. R. LOMER, M.A., Ph.D.

HON. REPRESENTATIVE IN GREAT BRITAIN—W. A. BULKELEY-EVANS,  
M.A., 5 Paper Buildings, Temple, London, E.C.4.

## INCORPORATED COLLEGES

MACDONALD COLLEGE, at Ste. Anne de Bellevue (about 20 miles from Montreal), including School of Agric., School for Teachers, and School of Household Science.

Principal—F. C. HARRISON, B.S.A. Tor., D.Sc.

ROYAL VICTORIA COLLEGE, Montreal (The Women's College of the Univ.).

Warden—Ethel Hurlbatt, M.A. Dub. (Somerville Coll., Oxford).

## PROFESSORS, LECTURERS, ETC., October 30, 1922

<i>Accountancy</i>		Thomson, L. R., B.A.Sc.	
Thompson, R. R., A.C.A. (Engl. & Wales)	Asst. Prof.		Spl. Lectr.
<i>Agriculture, v. infra</i>		<i>Bio-Chemistry</i> [Prof.	
<i>Anatomy</i> [Prof.		Macallum, A. B., M.A., M.B., Ph.D., D.Sc., LL.D., F.R.S.	
Whitnall, S. E., M.A., D.M. Ox.		Simpson, G. E., M.A., Ph.D.	Asst. Prof.
Freedman, A. O., M.D.	Lectr.		
MacDermot, H. E., M.D.	Lectr.	i Demr.	
Thompson, I. McL., B.Sc., M.B., Ch.B. Edin.	Lectr.	<i>Biology, v. Zool.</i>	
9 Demrs.		<i>Botany</i> [Macdonald Prof.	
<i>Architecture</i> [Macdonald Prof.		Lloyd, F. E., M.A. Princeton.	
Traquair, R., F.R.I.B.A.		Derick, Carrie M., M.A. (Morph. B.)	Prof.
Nobbs, P. E., M.A., F.R.I.B.A., A.R.C.A. (Design.)	Prof.	Scarth, G. W., M.A.	Lectr.
Dyonnet, E.	Spl. Instr.	i Demr.	
Turner, P. J., F.R.I.B.A. (Constrn., etc.)	Lectr.	<i>Chemistry, v. also Physiol.</i>	
Carless, W., O.B.E., F.R.I.B.A.		Ruttan, R. F., B.A., D.Sc. Tor., M.D.	Macdonald Prof.
	Asst. Prof.	Evans, N. N., M.A.Sc.	Assoc. Prof.

Johnson, F. M. G., M.Sc., Ph.D.  
Bres., F.I.C. Prof. (Inorg. C.).  
Maas, O., M.Sc., Ph.D. Harv.

Assoc. Prof.

Whitby, G. S., M.Sc., Ph.D.,  
A.R.C.S. Assoc. Prof.

McLean, A. R. M., M.Sc., Ph.D.  
Asst. Prof.

Hatcher, H. W., M.Sc., Ph.D.  
Asst. Prof.

9 Demrs.

### *Classics*

Laing, G. J., B.A. Tor.  
Ph.D. J.H.U. Prof.

Slack, S. B., M.A. Ox. (Lectr. in  
Comp. Philol.) Prof.

Carruthers, C. H., B.A. Ox., M.A.  
Asst. Prof.

Thompson, A. M., Ph.D. Harv.  
Asst. Prof.

Irwin, Eliz. A., M.A.  
Lectr. & Tutor.\*

*Commerce*, v. also Acctcy., Law  
Sugars, R. M., M.A.

Dir. of School and  
Assoc. Prof. of Spanish.

*Dentistry*, v. *infra*

*Economics*, v. Pol. Econ.

### *Education*

School for Teachers in Mac-  
donald College: [Dean & Prof.

Laird, S., M.A., B.Phil.

Brunt, H. D., M.A., Ph.D. Lectr.

Percival, W. P., B.A. Lectr.

Lockhart, A. R. B., B.A. Lectr.

Thompson, J. G., M.A. Lectr.

McOuat, J. E., B.S.A. Lectr.

Musgrove, R. B. Lectr.

Brownrigg, Miss N. Lectr.

2 Instrs.

Department of Physical Educa-  
tion:

Lamb, A. S., M.D. Director.

6 Assts.

*Engineering*, v. *infra*

### *English Lang. and Lit.*

Lafleur, P. T., M.A. Molson Prof.

McMillan, C., M.A., Ph.D. Harv.

Assoc. Prof.

Latham, G. W., B.A. Harv.

Assoc. Prof.

Noad, A. S., M.A. Lectr.

2 Assts.

*French* [Assoc. Prof.

Du Roure, R., Agrégé France

Morin, J. L., M.A. Asst. Prof.

Touren, Lucie, L. ès L. France

Lectr.\*

Villard, P., M.A., M.D., O.I.P.

Asst. Prof.

King, Mabel L., M.A. Lectr.

### *Geology*

Adams, F. D., Ph.D. Heid., LL.D.

Tor., D.Sc., F.G.S.A., F.R.S.

(G. and Palæont.) Logan Prof.

Bancroft, J. A., Ph.D.

Dawson Prof.

1 Demr.

### *German*

Walter, H., M.A. Edin., Ph.D.

Mun. Prof.

Lambert, E. T., B.A. Lond.

Asst. Prof.

Meyer, Bertha, M.A. Lectr.

### *Hebrew and Semitic Langs.*

Brockwell, C. A. B., M.A. Prof.

Gordon, A. R., M.A., D.Litt.

Aberd. Prof.

Graham, W. C., M.A. Lectr.

### *Hellenistic Jewish Lit.*

Abbott-Smith, G., M.A., D.D.,

D.C.L. Asst. Prof.

### *Histology and Embryology*

Simpson, J. C., B.Sc. Assoc. Prof.

Fisk, W. M., M.D. (Histol.) Lectr.

Jackson, F. Slater (Embry.)

Lectr.

### *History*

Williams, Basil, M.A. Ox. Prof.

Fryer, C. E., M.A., Ph.D. Harv.

Prof.

Waugh, T. R., M.A. Assoc. Prof.

\* In Royal Victoria Coll.

*Household Science*

Philp, Miss B., Head of the  
School of H.S. in Macdonald  
Coll.

5 Instrs.

*Law, v. infra**Logic, v. Philos.**Mathematics*

Harkness, J., M.A. Camb. (Pure  
M.) Redpath Prof.

Sullivan, C. T., B.A. Dal., M.Sc.,  
Ph.D. Chic., D.Sc.

Assoc. Prof.

Murray, D. A., Ph.D. J.H.U.  
(Applied M.) Prof.

Gillson, A. H. S., M.A. Camb.  
Assoc. Prof.

Matthews, T. H., M.A. Ox.  
Asst. Prof.

Tate, H., B.Sc., M.A. Dub.  
Asst. Prof.

Dodd, G. J., B.Sc. (M. and Civ.  
Engin.) Lectr.

Jamieson, R. E., B.Sc. (M. and  
Civ. Engin.) Lectr.

Eadie, R. S., M.Sc. Lectr.

*Medicine, v. infra**Metallurgy*

Stansfield, A., D.Sc. Lond.,  
A.R.S.M. Birks Prof.

Sproule, G. St. G., M.Sc. (Assay-  
ing) Lectr.

Pascoe, C. F. Spl. Lectr.

*Mineralogy*

[Assoc. Prof.]

Graham, R. P. D., B.A. Ox., M.Sc.

*Mining, v. Engineering**Music*

Perrin, H. C., Mus.D. Dub. Prof.  
Lichtenstein, Clara Assoc. Prof.\*

*Nursing*

Shaw, Miss M.  
Directress of School.  
18 Lectrs. and Instrs.

*Philology, v. Classics**Philosophy*

Caldwell, W., D.Sc. Edin. (Moral  
P.) Macdonald Prof.

Hickson, J. W. A., M.A., Ph.D.  
Halle (Logic and Met.)

Assoc. Prof.

*Physics*

[Macdonald Prof.]

Eve, A. S., D.Sc., F.R.S.

King, L. V., M.A. Camb., D.Sc.  
Prof.

Shaw, A. N., B.A. Camb., D.Sc.  
Assoc. Prof.

Gray, J. A., O.B.E., D.Sc.  
Assoc. Prof.

Reilley, H. E., B.A., M.Sc.  
Asst. Prof.

Keys, D. A., M.A., Ph.D.  
Asst. Prof.

10 Demrs.

*Physiology*

Tait, J., M.D., D.Sc. Drake Prof.  
Green, F., M.D. Lectr.

Notkin, L., M.D. Lectr.

Giblin, N., M.B., Ch.B. Lectr.

*Physiol. Chem.*

Shaw, T. P., M.D. Lectr.

*Political Economy*

Leacock, S., B.A. Tor., Ph.D.  
Chic., Litt.D., LL.D. Prof.

Hemmeon, J. C., M.A., Ph.D.  
Harv. Assoc. Prof.

Sandwell, B. K., B.A.  
Asst. Prof.

*Psychology, Exper.*

Tait, W. D., B.A. Dal., Ph.D.  
Harv. Assoc. Prof.

De Silva, H. R., M.A. Lectr.

*Social Service*

Dawson, C. A., Ph.D. Director.  
12 Lectrs. (Part-time).

*Spanish, v. Commerce**Zoology*

[Strathcona Prof.]

Wiley, A., D.Sc., F.R.S.  
Stafford, J., B.A. Tor., M.A., Ph.D.

Leip. Asst. Prof.  
Notkin, M., M.D. Lectr.

<b>Agriculture, School of, in Macdonald Coll.</b>		<i>Operative D.</i> Baxter, F. H. A., D.D.S. Prof.
<i>Agricultural Engineering</i> Heimpel, L. G., B.S.A. Lectr.		<i>Orthodontia</i> Morison, J. B., D.D.S. Prof. McClelland, A. W., D.D.S. Lectr.
<i>Animal Husbandry</i> Barton, H., B.S.A. Prof. Ness, A. R., B.S.A. Lectr. McQuat, L. C., B.S.A. Lectr.		<i>Prosthetic D.</i> Cameron, G. S., D.D.S. Prof. Dohan, J. S., D.D.S. Assoc. Prof.
<i>Bacteriology</i> [Prof. Harrison, F. C., D.Sc. (Principal) Hood, E. G., B.S.A. Lectr.		<i>D. Jurisprudence</i> [Lectr. Bond, W. L., B.A., B.C.L., K.C.
<i>Biology</i> Lochhead, W., B.A., M.Sc. Prof. Dickson, B. T., B.A., Ph.D. Prof. Biffen, W., B.Sc., N.D.D. Lectr. Coulson, J. G., M.A. Lectr.		<i>D. Anatomy</i> Jack, A. C., D.D.S. Lectr.
<i>Cereal Husbandry</i> Summerby, R., B.S.A. Prof. McRostie, G. P., Ph.D. Asst. Prof. Raymond, L. C., B.S.A. Lectr.		<i>Oral Surgery</i> Pennoyer, A. R., M.D. Lectr.
<i>Chemistry</i> Snell, J. F., Ph.D. Prof. McCarthy, J. B., B.A., D.Sc. Asst. Prof.		<i>D. History, Ethics and Econ.</i> Stevenson, F. A., D.D.S., D.M.D. Harv. Lectr.
<i>Homemakers Clubs, etc.</i> A Superintendent and 10 other Assts.		<b>Engineering, v. also Archit., Maths.</b>
<i>Horticulture</i> Bunting, T. G., B.S.A. Prof. Tawse, W. J., B.S.A. Lectr. Howitt, M. H., B.S.A. Lectr.		<i>Applied Mech. and Hydraulics</i> Brown, E., M.Sc., M.Eng. Prof. Batho, C., B.Sc. Manc., B.Eng. & M.Sc. Liv., D.Sc. Assoc. Prof.
<i>Physics</i> Lynde, C. J., Ph.D. Prof.		<i>Civil E.</i> Mackay, H. M., B.A., B.A.Sc., M.Am.Soc.C.E. Prof. Batho, C., B.Sc. Manc., M.Sc. and B.Eng. Liv., D.Sc. Assoc. Prof. Lamb, H. M., M.Sc. Assoc. Prof.
<i>Poultry</i> Jull, M. A., B.S.A. Lectr. Maw, W. A., B.S.A. Lectr.		<i>Economics</i> Brown, F. B., M.Sc. Lectr.
<b>Dentistry</b>		<i>Electrical E.</i> Herd, L. A., E.E. (Inst. Montef., Belg.), D.Sc. Macdonald Prof. Christie, C. V., M.A., B.Sc. Dal. Assoc. Prof. Burr, E. G., B.Sc. Asst. Prof. Wallace, G. A., B.Sc. Lectr.
<i>Clinical Dentistry</i> Thornton, A. W., D.D.S. (Dean of the Faculty) Prof.		<i>Freehand Draw. &amp; Descr. Geom.</i> Armstrong, H. F. Assoc. Prof.
<i>D. Pathology, Mat. Med. and Therap.</i> Henry, Fred. G., D.D.S. Prof.		<i>Highway and Municipal E.</i> French, R. de L., B.Sc., C.E. Prof.

*Law, Engineering*

Weldon, J. W. Lectr.

*Mechanical E.*

McKergow, C. M., M.Sc. Prof.

Roberts, A. R., M.Sc. Assoc. Prof.

Coote, J. A., B.Sc. Lectr.

Patton, R. H., B.Sc. Lectr.

Vessot, C. U., M.Sc. Lectr.

3 Demrs.

*Mining E.* [Macdonald Prof.

Porter, J. B., E.M., Ph.D. Col.,

D.Sc. (Hon.) Cape, M.I.C.E.

Bell, J. W., M.Sc. Assoc. Prof.

..... Lectr.

3 Research Fellows

*Surveying and Geodesy*

Kelly, A. J., B.Sc. Asst. Prof.

Weir, James, B.Sc. Asst. Prof.

*Law**Civil L.*

Howard, Hon. Justice E. E., B.A.,

B.C.L., K.C. Prof.

Chipman, W. F., B.A., B.C.L.,

K.C. Asst. Prof.

Beullac, P., K.C. Lectr.

*Civil Procedure* [Prof.

Surveyor, Hon. Justice E. F.,

B.A. Laval, B.C.L., K.C.

*Commercial L.*

Martin, Justice J. E., B.C.L., K.C.

Prof.

Tyndale, O. S., M.A., B.C.L. Lectr.

*Common L. and Jurispr.*

Smith, H. A., M.A. Ox. Prof.

*Constitutional L.*

Mackay, I. A., M.A., LL.B. Dal.,

Ph.D. Corn. Prof.

*Criminal L.*

Greenshields, Hon. Justice R. A.

E., B.A., B.C.L. Prof.

*Ethics, Legal*

Mignault, P. B., LL.D. Laval,

K.C. Prof.

*Evidence*

Wainwright, A., B.A., B.C.L., K.C.

*Internat. L., Private*

McDougall, G. W., B.A., B.C.L.,

K.C. Prof.

*Municipal L.*

Rinfret, T., B.C.L. Lectr.

*Notarial Law*

Bridgman, R. H., B.C.L. Lectr.

*Roman L.*

..... Gale Prof.

Rose, H. E., B.A., B.C.L., LL.M.

Lectr.

*Medicine* (for subjects of first 2  
yrs.—Anat., etc., v. *supra*)*Bacteriology*

Bruère, A. A., M.D. Edin. (B. and

Clin. Med.) Asst. Prof.

McKee, S. H., C.M.G., B.A., M.D.

(B. and Ophth.) Lectr.

1 Asst. Demr.

*Dermatology*, v. also Ped.

Burnett, P., M.D. Lectr.

Campbell, C. G., B.Sc., M.D.

Lectr.

*Gynæcology and Obst.*

Chipman, W. W., B.A., M.D. and

F.R.C.S. Edin. Prof.

Lockhart, F. A. L., M.B. Edin.,

M.D. Prof.

Goodall, J. R., O.B.E., B.A., M.D.,

D.Sc. Asst. Prof.

Little, H. M., B.A., M.D.

Asst. Prof.

Patrick, D., M.D. Lectr.

Duncan, J. W., M.D. Lectr.

Burgess, H. C., M.D. Lectr.

Fraser, J. R., M.D. Lectr.

*History of M.*

Macphail, Sir A., B.A., M.D. Prof.

*Hygiene*

Starkey, T. A., M.B., D.Ph.,

L.R.C.P. Lond., M.R.C.S.

Eng., M.D., C.M.

McDonald, R. St. J., B.A., M.D.,

D.P.H. Lectr.

Jones, F. B., M.D., D.P.H. Lectr.

*Med. Jurispr.* [Prof.  
MacTaggart, D. D., B.A.Sc., M.D.

*Med. and Clin. Med.*, v. also  
Bact., Ped.

Finley, F. G., C.B., M.B. Lond.,  
M.D. Prof.

Martin, C. F., B.A., M.D. Prof.

Hamilton, W. F., M.D. Assoc. Prof.

Gordon, A. H., M.D. Lectr.

Peters, C. A., M.D. Lectr.

Mason, E. H., M.D. Lectr.

Robertson, A. A., B.A., M.D.

Lectr.

Kaufmann, J., M.D. Lectr.

Cushing, H. B., M.D. Lectr.

Lewis, D. S., B.A., M.D. Lectr.

Wylde, C. F., M.D. Lectr.

Moffatt, C. F., M.D. Lectr.

18 Demrs. and Asst. Demrs.

#### *Mental Diseases*

Burgess, T. J. W., M.D. (Med.

Supt. Hospl. for Insane) Prof.

Porteous, C. A., M.D. Lectr.

#### *Neurology, Clin.*

Russel, C. K., B.A., M.D. Lectr.

Mackay, F. H., B.A. Lectr.

#### *Ophthalmology*, v. also Bact.

Stirling, J. W., M.B. Edin., M.D.

Prof.

Byers, W. G. M., M.D., D.Sc. Prof.

Mathewson, G. H., B.A., M.D.

Prof.

Tooke, F. T., B.A., M.D. Demr.

McKee, S. H., B.A., M.D. Lectr.

4 Demrs. and Asst. Demrs.

#### *Oto-Laryngology*

Birkett, H. S., C.B., M.D. Prof.

Hamilton, H. D., M.A. Bish., M.D.,

L.R.C.P. and S. Edin., L.F.P.S.

Glas. (O.-L. & Rhin.) Lectr.

Craig, R. H., M.D. (O.-L. & Rhin.)

Lectr.

5 Demrs. and Asst. Demrs.

#### *Parasitology*

[Assoc. Prof.

Todd, J. L., B.A., M.D., D.Sc.

(Hon.) Liv., M.R.C.S.E.

#### *Pathology*

Oertel, H., M.D. Strathcona Prof.

Rhea, L. J., B.Sc., M.D.

Assoc. Prof.

Abbott, Maude E., B.A., M.D.

Bish., L.R.C.P. and S. Edin.

Lectr.

Crowdy, C. T., M.D.

Lectr.

7 Demrs.

#### *Pediatrics and Dermatology*

Fry, F. M., B.A., M.D. (and Demr.

in Clin. M.) Lectr. in P.

Cushing, H. B., M.D. Lectr. in P.

Enright, W. E., B.A., M.D. Demr.

#### *Pharmacy*

Moore, A. B. J., Ph.G.

Hd. of Dept., Prof.

#### *Pharmacology*

Barbour, H. G., A.B. Trin. Coll.

Conn., M.D. J.H.U. Prof.

Stehle, R. L. Asst. Prof.

Mason, J. L. D., B.A., M.D. Lectr.

Bourne, W., M.D. Lectr.

Lewis, D. S., B.A., M.D. Lectr.

#### *Psychiatry*

Burgess, T. J. W., M.D. Prof.

Mundie, G. S., B.A., M.D. Lectr.

Porteous, C. A., M.D. Lectr.

#### *Radiology*

2 Demrs.

#### *Surgery and Clin. Surg.*

Armstrong, G. E., C.M.G., M.D.,

LL.D. Qu., D.Sc. Liv. Prof.

Hutchison, J. A., C.B.E., M.D.,

L.R.C.P. and S. Edin. Prof.

Garrow, A. E., M.D. Asst. Prof.

Bazin, A. T., M.D. (S. and Applied

Anat.) Asst. Prof.

Eberts, E. M., M.D., M.R.C.S. Eng.

Asst. Prof.

Archibald, E. W., B.A., M.D.

Asst. Prof.

Barlow, W. L., B.A., M.D.

Clin. Lectr.

Keenan, C. B., M.D. Clin. Lectr.

Patch, F. S., B.A., M.D. (Genito-Urinary)	Prof.	Howell, W. B., M.D. (Anæsthesia)	Lectr.
Mackenzie, D. W., B.A., M.D. (Genito-Urinary)	Prof.	Hepburn, W. G., M.D. (Anæsthesia)	Lectr.
Turner, W. G., B.A., M.D., M.R.C.S. Eng. (Orthop. Surg.)	Prof.	Scrimger, F. A. C., B.A., M.D.	Lectr.
Forbes, A. M., M.D. (Orthop. Surg.)	Prof.	Tees, F. J., B.A., M.D.	Lectr.
		12 Demrs. and Asst. Demrs.	

## AFFILIATED INSTITUTIONS

ACADIA, ALBERTA, MT. ALLISON, AND ST. FRANCIS XAVIER UNIVS. Students who have completed the 2-yr. course in Engin. of these Univs. are admitted directly to the 3rd yr. in McGill Engin. courses. Alberta students who have completed their 3rd yr. in the Med. course are admitted to the 4th in McGill.

GRADUATES OF THE ROYAL MILITARY COLLEGE, Kingston, are admitted to the 3rd yr. in McGill Engin. courses. Graduates and students of the Mechanical Science course of CAMBRIDGE are admitted to advanced standing in the Faculty of Appl. Sc. Particulars obtainable from the Dean of the Faculty.

## THEOLOGICAL COLLEGES

CONGREGATIONAL COLLEGE OF CANADA, MONTREAL. Principal, D. L. Ritchie, B.A., D.D.

DIOCESAN COLLEGE OF MONTREAL. Principal, E. I. Rexford, M.A., LL.D.

PRESBYTERIAN COLLEGE, MONTREAL. Principal, D. J. Fraser, M.A., LL.D.

WESLEYAN COLLEGE OF MONTREAL. Principal, J. Smyth, LL.D.

Students enter after graduation or pursue courses concurrently in Arts at the Univ., in Theol. at the Coll.—6 yrs. in all.

## GENERAL INFORMATION (v. also p. 280)

The Hon. James McGill, of Montreal, who died in 1813, bequeathed 46 acres of land, with some buildings and £10,000, to found a college, and in 1821 the Royal Institution for the Advancement of Learning, the trustees for the purposes of the bequest, obtained a Royal Charter (amended in 1852) under which the work of teaching was begun in the Faculties of Arts and Med. in 1829. The Governors are the members of the Royal Institution above mentioned. Their number is limited to 25, and vacancies are filled by nomination of the remaining members, with the approval of the Visitor. The Govrs., Principal, and 42 Fellows (representing faculties and depts., grads., affil. colls., and other bodies) constitute the Corporation, the highest academical body, which frames regulations. The Peter Redpath Museum was opened in 1882, the Redpath Library in 1893, Royal Victoria Coll. in 1899, the Conservatorium in 1904. Macdonald College was opened in 1907, and in 1911 Sir Wm. Macdonald purchased for the use of the Univ., at a cost of \$1,117,640, 25 acres of land, destined for students' residences and athletic grounds. In this year \$1,550,000 was raised for the Univ. chiefly from Montreal citizens. Sir Wm. Macdonald bequeathed nearly \$2,000,000, of which \$500,000 was for the Medical Faculty and \$300,000 for the Conservatorium. In 1918 the Carnegie Corporation, New York, gave \$1,000,000 in recognition of McGill's



service and sacrifice in the Great War. In 1920 the sum of \$1,000,000 was given by the Rockefeller Foundation for the Faculty of Medicine; \$1,000,000 by the Provincial Govt. for general purposes; and \$4,400,000 was raised from the graduates and the citizens of Montreal as a general endowment. Income from Investments, about \$1,000,000.

**SPECIAL FEATURES.** The provision for instruction and research in Applied Science is exceptionally ample, especially in Engin. in all its branches. The Med. School also is exceptionally strong.

**LIBRARIES,** 181,000 vols. (Medical, 30,000; large Ophth. Dept.) and 31,000 pamphlets; Peter Redpath collection of 10,000 political and religious tracts dating from A.D. 1600; E. S. Wood Library of Ornithology; Blackader Library of Archit.; Blacker Library of Zool.; Travelling Library. **LABORATORIES:** Engineering and Chemistry, each accommodating 200 students; Physics; Zool., 100 students, 3 rooms specially fitted up for research; Bot., 43 students; Physiol., 80; Psych. Research; Agric. Research. **FARM,** Live Stock and Grain, 786 acres. **ASTRON. OBSERVATORY.** **MEDICAL MUSEUM** (Strathcona), said to be the finest in America; rich collection of disturbances of heart and vascular system and aneurisms. **HOSPITALS** available for clinics, general—800 beds, several special.

**FACULTIES.** Arts, Law, Medicine (including Pharmacy), Applied Science (Archit., and 6 branches of Engin.—Chem., Civil, Elec., Mech., Metall., Mining), Agric., Dentistry, Music. The Univ. has also Schools of Commerce, Physical Educn., Graduate Nurses, Social Service, a Graduate School, and (in Macdonald Coll.) Household Science and a School for Teachers.

**ADMISSION.** For candidates in Great Britain an examn. is held in London in June: particulars obtainable from W. A. Evans, M.A., 5 Paper Buildings, Temple, London, E.C.4. *Women* are not admitted to the Med. Faculty until after completing 2 yrs. in Arts.

**DEGREE COURSES.** 3 yrs.—B.Com., B.C.L., LL.B., Mus.Bac.; 4 yrs.—B.A., B.Sc., B.S.A., B.H.S. (Household Science), D.D.S.; 5 yrs.—B.Arch.; 6 yrs.—M.D., C.M.

B.A. or B.Sc. (Arts) course combined with B.Com., 5 yrs.; with Appl. Sc. or Theol., 6; Med., 8.

Med. students of 5 yrs.' standing of an approved institution may be admitted to the final examn. after one full session in McG. Recent grads. of approved Univs. may qualify for examns. by advanced courses or special research.

**HIGHER DEGREES.** Obtainable by 1 yr. of resident graduate study at McG., thesis and examn.—M.A., M.Sc., LL.M., M.S.A.; by 3 yrs. of graduate study—Ph.D.; by valuable contribution to legal science—D.C.L.; by a composition and examn. not less than 3 yrs. after taking the Mus.Bac.—Mus.Doc.; on recommendation of Board of Grad. studies—D.Sc., D.Litt.

**DIPLOMAS.** Lic. Mus., D.P.H., Teachers', Pharmacy, Graduate Nurses'.

**OTHER COURSES.** Music Certif., Agric. (2 yrs. or 1 yr.), Household Sc. (2 yrs., 1 yr., or shorter), Social Science (1 yr., and numerous special courses).

**ATTENDANCE** at lectures at the Univ. or Macdonald or Affiliated Coll. is indispensable.

**RECOGNITION** by other Univs. v. pp. 48, 229, 237, 266.

**FEES.** Per annual session, Arts, \$100; Appl. Sc., \$205; Med., \$200; Dent., \$200; Law, \$150; Music, \$175; Commerce, \$150; M.A. or Ph.D.

course, \$40. Graduation fee for M.A. or M.Sc., \$20; Ph.D., \$30; D.Sc. or D.Litt., \$80.

**SCHOLARSHIPS FOR GRADUATES.** In Econ. and Polit. Sc., Allen Oliver, \$700; Chem., Sterry Hunt; Geol., Le Roy, \$700; Mining Research and Teaching Fellowships, 3 of \$500 each; Med. Research, especially Obstetrics and Gynæc., A. A. Browne Endowment, \$10,000, open to grads. of any recognized Med. school; Path. Research, J. Douglas Endowment, \$25,000; any subject, "Delta Upsilon," \$800; Law, Macdonald Endowment, \$20,000.

**RESIDENCE.** Women, Roy. Vict. Coll.; men, Strathcona Hall (Y.M.C.A.), accommodation for 60. **PHYSICAL TRAINING** is compulsory, and students are subjected to physical examn. on entering the Univ. Board and residence in Roy. Vict. Coll., \$500 per session; in private houses, \$60 p.m. and upwards; rooms only, \$15 to \$20 p.m.

McGill Union dining-room, accommodating 120 students at a time, provides inexpensive meals.

**PUBLICATIONS.** *Calendar* (June); *Coll. Announcements* (May to July); *Annual Report* (Dec.); *McGill News*, quarterly, by Graduates' Soc.; *McGill Daily*, by students.

## THE YEAR 1921-22

**PRINCIPAL BENEFACTIONS.** Dr. Francis McLennan and family, \$500 in connexion with travelling libraries for clergymen; Walter Stewart, Bust of Sir W. Macdonald; Prof. Traquair, the University Flag; Mrs. R. E. Kingsford, collection of coins and medals; Lord Atholstan, the "Shirley Collection" of minerals.

**NEW BUILDINGS.** Biological Building (cost over \$500,000) was officially opened on Oct. 5, 1922; Pathological Building (to cost \$455,000) will be ready for occupation by Oct. 1923; a building for the Dental Clinic, erected as a wing of the Montreal General Hospital at a cost of \$50,000, was formally opened in Jan. 1922.

**OTHER DEVELOPMENTS.** Revision of curriculum of Faculty of Arts: (1) A full course is now 3 hours per week instead of 4, and College work will be done on Saturday, as on the other days of the week. (2) There are fewer compulsory subjects in the B.A. course for the first 2 years, but the principle of a somewhat concentrated course of study after the first year has been preserved. (The principal part of the work will be in 3 subjects for 3 years of the course.) (3) Every student entering the Faculty is now assigned to some member of the staff, who will guide him as to his studies and will generally watch over his interests. (4) Means have been taken to keep First Year students up to the mark by a system of tests throughout the session, and one who is reported as having fallen below the required standard in two successive tests will be placed "on probation." If in three successive tests he is still below the standard he will be "dropped" from the Univ.

A Faculty of Graduate Studies and Research has been organized with the Vice-Principal as Dean.

The Social Service Dept. has been discontinued, and the work is now associated in a general way with the Faculty of Arts. An Asst. Prof. of Social Science has been appointed to give certain courses which will count towards a degree. Other (Extension) courses will be given, and a candidate for the Diploma will be required to take some of these as well as the courses in Arts. Some practical work will also have to be done.

The Graduates' Society was granted representation (W. Molson) on the Board of Governors. The Graduates have now 3 representatives on this Board.

The Government of France presented a scholarship of the value of 6000 francs, with an allowance of 1000 francs for travelling expenses, to a graduate of the Univ. who wishes to prosecute his or her studies in Paris.

**NUMBER OF STUDENTS.** Total, excluding 971 enrolled in Extension courses, 2754 (in 1920-21, 2756). Undergrads. in Arts, 457 (including 185 women); School of Commerce, 187 (w. 1); Applied Sc., 660; Med., 713 (w. 17); Dent., 115; Law, 95 (w. 5); Agric., 60 (w. 2); Partial students in Arts, 111; other Faculties, 90; Music, 28 women; preparing for D.P.H., 3; for Diploma of Pharmacy, 42 (w. 5); Dept. of Social Service, 28 (including 25 partials); Physical Education, 32 (4 partials); School for Graduate Nurses, 36 (14 partials); Graduate School, 68 (w. 18); Household Sc., 89 (including 33 partials).

**DEGREES CONFERRED.** B.A.; 52 (women, 22); B.Sc. in Arts, 12 (w. 3); B.Com., 39 (w. 1); B.Sc. in Applied Science, 114; B.Arch., 2; B.C.L., 23; LL.B., 9 (w. 1); Mus.B., 1; B.Sc. in Medicine, 1; M.D., C.M., 114 (w. 5); D.D.S., 11; B.S.A., 20; M.A., 4 (w. 2); M.Sc., 25 (w. 3); LL.M., 1; Ph.D., 2; Mus.D., 1; and the Honorary Degree of LL.D. on Chief Justice Sir Louis H. Davies, D. J. Fraser, E. P. Mathewson, General J. J. Pershing, J. W. Ross, and Sir C. S. Sherrington.

**SUMMER SCHOOLS.** The principal schools held in connexion with the Univ. in 1922: (1) at Macdonald Coll., one for rural improvement and one for teachers of Drawing; (2) to train specialists for teaching French; (3) a French school of popular character.

**RESIGNATIONS.** A. H. Egerton; Duncan MacKenzie, to accept the Supervisorship of Music in the public schools of Toronto; H. A. Lafleur, Emeritus Prof. of Med., to attend to his private practice.

# McMASTER UNIVERSITY, TORONTO

CHANCELLOR AND PRINCIPAL—.....

REGISTRAR AND TREASURER—E. J. BENGOUGH, B.A.

LIBRARIAN—ENID A. MCGREGOR, B.A.

## PROFESSORS, LECTURERS, ETC., September 21, 1922

<i>Biology</i>	[Prof.	<i>Political Economy and Sociology</i>	
Smith, R. W., B.A., Ph.D. Chic.		Michell, H., M.A. Ox.	Prof.
<i>Chemistry</i>		<i>Public Reading and Speaking</i>	
Walker, W. O., M.A. Tor.	Prof.	Kirkpatrick, F. H., Ph.D.	
<i>English</i>			Spl. Lectr.
McLay, W. S. W., M.A. Tor.	Prof.		
McGregor, Enid A., B.A.	Reader.		
<i>French</i>		<i>Theology</i>	
Franzen - Swedelius, B., B.A., Ph.D. Col.	Prof.	<i>Christian Ethics, Education, and Sociology</i>	[Prof.
<i>Geology</i>	[Prof.	McCrimmon, A. L., M.A., LL.D.	
McNairn, W. H., M.A., Ph.D. Tor.		<i>Church History and Missions</i>	
<i>German</i>		Brown, J. G., M.A., D.D.	Prof.
Mueller, P. W., B.A.	Prof.	<i>Homiletics and Pastoral Theol.</i>	
<i>Greek</i>		Gilmour, J. L., M.A., D.D.	Prof.
Campbell, P. S., M.A.	Prof.	<i>New Test. and Patristic Greek</i>	
<i>History</i>		Farmer, J. H., B.A., LL.D.	Prof.
New, C. W., B.A., B.D., Ph.D. Chic.	Prof.	<i>Old Test., Hebrew and Aramaic</i>	
<i>Latin</i>		Curr, H. S., M.A. Edin., B.D., B.Litt.	Prof.
Moon, A. J., M.A. Virg.	Prof.	<i>System. Theol. and Apologetics</i>	
<i>Mathematics</i>	[Prof.	Keirstead, E. M., B.A. New Bruns., M.A., D.D. Acad., LL.D.	
Findlay, W., M.A., Ph.D. Chic.		St. Fr. X.	Prof.
<i>Philosophy, Psychology, Logic, and Ethics</i>		Hon. Lectrs. :	
Ten Broeke, J., M.A., Ph.D.	Prof.	MacNeill, J., B.A., D.D. (Evangelism).	
<i>Physics</i>	[Prof.	Merrill, B. W., B.A., B.Th. (Rel. Educn.).	
Dawes, H. F., M.A., Ph.D. Tor.			

## AFFILIATED COLLEGE (v. also p. 280)

BRANDON COLLEGE, Brandon, Man., controlled by Baptist Union of W. Canada. Affild. for courses in Arts.

## GENERAL INFORMATION

In 1887 Toronto Baptist College and Woodstock College, Woodstock, were united under the name of McMaster University, and their already existing endowments were increased by \$900,000, received under the will of the Hon. Wm. McMaster. The Board of Governors (16) are elected by the Baptist Convention of Ontario and Quebec. There is no religious test for entrance, but the Profs. and Lectrs. must be members of some evangelical church. Woodstock Coll. was separated from the Univ. in 1888, but both it and Moulton Ladies' Coll., Toronto (founded in 1888), are represented on the Senate.

**LIBRARY**, 24,000 vols. **LABORATORIES**: Phys., Biol., Chem., Mineral. Science Hall has 24 lecture rooms and labs.

**DEGREE COURSES.** 4 or 5 yrs., B.A.; 3 yrs. (after completing 2 yrs. of Arts course), B.Th.; 6 yrs., combined B.A. and B.Th. The first 2 yrs. in Arts do not necessarily involve attendance at lectures. Brandon Coll. provides instruction in Swedish for immigrants from that country.

The B.A. degree is recognized by Ox., Camb., Lond., and N.Y. State, v. also p. 48.

**HIGHER DEGREES.** Open to B.A. after 1-yr. course (attendance at lectures not required),—M.A.; to B.Th. who are also B.A. and have taken 3 yrs. in Hebrew, involving 1 yr. of study after graduating as B.Th.,—B.D.

**DIPLOMA.** English Theol., 3 yrs.' course.

**CERTIFICATE.** Missionary Training for women.

**ADULT EDUCATION.** For adults who have not the necessary foundation for admission to the English Theol. or Women's Missionary course, a year of literary and biblical work qualifying for such admission is provided, chiefly in the form of evening classes.

**FEES.** Annually, for tuition, examn., library—Arts, \$50, Theol., \$12. For student organizations, athletics, etc., men, \$8, women, \$6.50.

**RESIDENCE.** Board and room per session, men, in McMaster Hall, \$240; women, in Wallingford Hall, \$10 a week.

**PUBLICATIONS.** *Calendar* (June); *McMaster Monthly* (students' magazine); *McMaster Graduate*, quarterly.

## THE YEAR 1921-22

**NUMBER OF STUDENTS (1921-22).** Preparing for B.A.—193; B.Th. and Theol.Dipl.—28; Missionary Training Certif.—3. Three graduates carried on advanced work at Toronto, 1 at McGill, 8 at Univs. in the U.S.A.

**HONORARY DEGREES CONFERRED.** LL.D.—R. D. George, C. L. Starr, H. L. MacNeill.

**OTHER DEGREES.** B.A., 61; B.Th., 3; M.A., 6.

# UNIVERSITY OF MANITOBA, WINNIPEG

VISITOR—THE LIEUT.-GOVERNOR OF THE PROVINCE.

CHAIRMAN OF THE BOARD OF GOVERNORS—ISAAC PITBLADO, M.A., LL.D., K.C.

VICE-CHAIRMAN—J. A. MACHRAY, M.A., LL.B., K.C.

CHANCELLOR—Most Rev. S. P. MATHESON, D.D., D.C.L., Archbishop of Rupert's Land.

VICE-CHANCELLOR—Rt. Rev. Mgr. A. A. CHERRIER, LL.D.

PRESIDENT—JAMES A. MACLEAN, Ph.D., LL.D.

REGISTRAR—W. J. SPENCE, B.A.

LIBRARIAN—F. E. NUTTALL, M.A.

DEAN OF WOMEN—URSILLA N. MACDONNELL, M.A., Ph.D.

## PROFESSORS, LECTURERS, ETC., October 1922

### *Anatomy*

Grant, J. C. B., M.B., Ch.B., F.R.C.S. Edin. Prof.  
McGibbon, R. T., M.B., Ch.B. Glas. Asst. Prof.  
Wheeler, D., M.A., M.D., C.M., M.R.C.S. Eng., L.R.C.P. Lond. Lectr.  
McAlister, H. C., M.D. Demr.  
Abbott, W. F., B.A., M.D., C.M. Demr.  
Tisdale, W. F., M.D., C.M. Demr.

### *Architecture*

Stoughton, A. A., Ph.B. Col. Prof.

### *Bio-Chemistry*

Cameron, A. T., M.A., B.Sc. Edin., F.I.C. Assoc. Prof.

### *Botany*

Buller, A. H. R., B.Sc. Lond., D.Sc. Birm., Ph.D. Leip. Prof.  
Roberts, H. F., B.A. Kans., LL.B. N.-Wstn., M.Sc. Kans. (Agr.) Asst. Prof.  
Lowe, C. W., M.Sc. Birm. Lectr.  
1 Demr.

### *Chemistry*

[Prof.  
Parker, M. A., B.Sc. Glas., F.I.C.  
Armes, H. P., B.Sc. Leeds, Ph.D. Stras. Asst. Prof.  
Shipley, J. W., M.A., Ph.D. Harv. Asst. Prof.  
Lipsett, S. G., B.Sc. Asst.  
2 Demrs. and 4 Student Assts.

### *Classics*

Clark, F. W., Ph.D. Chic., B.A. Prof.  
Taylor, J. W., M.A. Tor., Ph.D. Chic. Asst. Prof.  
Hugill, W. M., B.A. Tor. Asst. Prof.

### *Engineering, Civil*

Finlayson, J. N., M.Sc. McG., M.E.I. Can. Prof.  
Johnstone, L. I., B.S. Maine, A.M. Amer. Soc. C.E. Asst. Prof.  
Moffatt, R. W., B.A.Sc. Tor., A.M.E.I. Can. Asst. Prof.  
Cameron, C. F., B.A., B.C.E., A.M.E.I. Can. Lectr.

McLean, D. L., B.Sc. McG.,  
A.M.E.I. Can. Lectr.  
3 Demrs.

*Engineering, Electrical*

Fetherstonhaugh, E. P., B.Sc.  
McG., M.E.I.C., A.M.A.I.E.E.  
Dean of Fac. Prof.  
Dorsey, J. W., E.E. Lehigh,  
A.M.E.I.C. Asst. Prof.  
1 Demr.

*Engineering, Mechanical*

Hall, N. M., O.B.E., B.Sc. McG.,  
A.M.E.I.C. Asst. Prof.

*English*

Crawford, A. W., M.A. Tor., Ph.D.  
Corn. Prof.  
Perry, A. J., M.A. Yale Asst. Prof.  
Allison, W. T., M.A. Tor., Ph.D.  
Yale Asst. Prof.  
Amos, Flora R., B.A. Tor., Ph.D.  
Col. Asst. Prof.  
Haddow, G. C., M.A. Tor., B.A.  
Ox. Asst.

*French*

Osborne, W. F., M.A. Tor. Prof.  
Green, F. C., M.A., St. And., Ph.D.  
Cologne Asst. Prof.  
Ballu, Céline A., B.A. Wisc. Lectr.  
Haynaud, A. Marie, B.A. Qu.  
Lectr.

*Geology and Mineralogy*

Wallace, R. C., M.A., D.Sc. Edin.,  
Ph.D. Gött., F.G.S. Prof.  
De Lury, J. S., B.A. Tor.,  
M.A.I.M.E. Asst. Prof.

*German*

Heinzelmann, J. H., B.A. Ill.,  
Ph.D. Chic. Prof.  
Thorlaksson, E. J., B.A. Asst.

*History*

Martin, C. B., M.A. N. Bruns.,  
M.A., B.Litt. Ox. Prof.  
Harvey, D. C., B.A. Dal., M.A. Ox.  
Asst. Prof.  
Howe, J. E., B.A. Yale, M.A.  
Acad. Lectr.  
MacDonnell, Mrs. U. N., M.A.,  
Ph.D. Lectr.

*Mathematics*

MacLean, N. B., M.A. Tor. Prof.  
Wilson, N. R., M.A. Tor., Ph.D.  
Chic. Prof.  
Warren, L. A. H., M.A. Qu., Ph.D.  
Chic. Asst. Prof.  
Tier, W., M.A. Tor., Dean of Fac.  
of Arts Asst. Prof.  
Nowlan, F. S., M.A. Harv.  
Asst. Prof.  
1 Fellow.

*Pharmacy*

[Prof.  
Bletcher, H. E., B.Sc. (Phar.)  
1 Demr.

*Philosophy*

[Prof.  
Wright, H. W., B.A., Ph.D. Corn.  
Lodge, R. C., M.A. Ox. Prof.

*Physics*

Allen, Frank, M.A. N. Bruns. &  
Corn., Ph.D. Corn. Prof.  
McClung, R. K., B.A. Camb., M.A.,  
D.Sc. McG. Asst. Prof.  
Miller, C. D., B.S. Rich., Ph.D.  
Chic. Asst. Prof.  
4 Demrs.

*Physiology, v. Medicine*

*Political Economy*

Clark, A. B., M.A. Edin. Prof.  
Jones, R. F., M.A. Liv.  
Asst. Prof.  
McCullough, Lily A., M.A., LL.B.  
Asst.

*Zoology*

O'Donoghue, C. H., D.Sc. Lond.,  
F.Z.S. Prof.  
Riley, C. F. C., M.A. Doane, B.S.  
Mich., M.S. Ill. Asst. Prof.  
Bulman, Eileen, M.A. Col., B.Sc.  
Lectr.

*Medicine (for subjects of first 2  
yrs.—Anat., etc., v. supra)*

*Bacteriology and Hygiene*

Bell, G., B.A. Tor., M.D., C.M.  
Prof.

Douglas, A. J., B.A., M.D., C.M.  
(Hygiene) Prof.  
Cadham, F. T., B.A., M.D. (B. and  
Serology) Asst. Prof.  
Fraser, M. S., B.A., M.D., C.M.  
(Hygiene) Lectr.  
3 Demrs.

### *Gynæcology*

Simpson, R. M., M.D., C.M.,  
L.R.C.P. Lond., M.R.C.S.  
Eng., F.A.C.S. Prof.  
Mackay, D. S., O.B.E., M.D.,  
C.M., F.R.C.S. Edin.,  
F.A.C.S. (Clin. G.) Assoc. Prof.  
Pullar, J., B.A., M.D., C.M.  
Assoc. Prof.  
Bercovitch, A., M.D., C.M. Lectr.  
McQueen, J. D., M.D., C.M.,  
F.A.C.S. Lectr.

### *Hygiene, v. Bacteriology*

### *Laryngology and Otology*

Prowse, S. W., B.A., M.D. Edin.,  
F.R.C.S. Edin., F.A.C.S.,  
Dean of Fac. Prof.  
Fletcher, G. W., M.D., F.A.C.S.  
Assoc. Prof.  
Leishman, A., M.D. Lectr.  
Washington, E. J., M.D. Lectr.

### *Materia Medica and Pharmacy*

Horner, A. E., Ph.C. Lectr.

### *Medicine and Clinical Medicine*

Montgomery, E. W., M.A., M.D.,  
C.M., F.A.C.P.  
Prof. of Clin. Med.

### *Assoc. Profs. of Clin. Med. :*

Burridge, A. J., M.D., F.A.C.P.  
(Therap.).  
Davidson, J. R., B.A., M.D., C.M.  
Hunter, C., M.A., M.D., M.R.C.P.  
Lond. (Therap.).  
Moody, A. W., M.D., C.M., F.A.C.P.  
Rogers, W., B.A., M.D., C.M.,  
F.A.C.P.  
Gilmour, C. R., M.D., C.M.  
Pope, E. L., B.A., M.D., C.M.,  
M.R.C.P. Lond.

Young, F. A., O.B.E., B.A., M.B.,  
F.A.C.P.

Chestnut, W., M.D., C.M.  
Assoc. Prof. of Med.

Stewart, D. A., B.A., M.D.  
Assoc. Prof. of Med.  
and Clin. Med.

### *Asst. Profs. of Clin. Med. :*

Alexander, A. B., B.A., M.D.  
Ferguson, R. G., B.A., M.D.  
Moorhead, E. S., M.D., B.Ch. Dub.  
Mackay, H., M.D., C.M. (Dermato-  
logy).  
Mathers, A. T., M.D., C.M. (Psy-  
chiatry).

### *Lectrs. in Clin. Med. :*

Benner, F., M.D., C.M.  
Campbell, S., C.M.G., M.D.  
Hart, F., M.D., C.M.  
Swan, R. R., M.B., Ch.B. Edin.  
Bell, F. C., C.M.G., B.A., M.D.  
Lectr. in Dermatology.  
McMillan, J. C., M.D., F.A.C.P.  
Lectr. in Roentgenology.  
and Electro-therapy.

9 Demrs.

### *Medical Jurisprudence*

McConnell, B. J., M.D. Lectr.

### *Obstetrics*

McCalman, D. H., B.A., M.D.,  
C.M. Prof.  
Bjornson, O., M.D., C.M., F.A.C.S.  
Assoc. Prof.  
Mitchell, R. B., B.A., M.D., C.M.,  
F.A.C.S. Assoc. Prof.  
Coulter, J. E., M.D., C.M.,  
F.A.C.S. Lectr.  
Campbell, W. G., M.D., C.M.  
Lectr.

### *Ophthalmology*

Smith, W. H., M.A., M.D., C.M.,  
F.A.C.S. Prof.  
Bell, T. H., M.C., M.D., C.M.,  
F.A.C.S. Assoc. Prof.  
Bell, P. G., B.A., M.D., F.A.C.S.  
Assoc. Prof.  
Stefansson, J., M.D. Lectr.



*Pediatrics*

Rorke, R. F., M.D., C.M.

Assoc. Prof.

MacArthur, C., M.D. Lectr.

Norton, E. L., M.B., B.Sc. Lond.

Lectr.

*Pathology*

Boyd, W., M.D., M.R.C.P. Edin.,

Dipl. Psych. Prof.

Nicholson, D., M.D., C.M. Lectr.

*Physiology and Pharmacology*

Moorhouse, V. H. K., M.C., B.A.,

M.B. Tor. Prof.

*Surgery and Clinical Surgery*

Halpenny, J., M.A., M.D., C.M.,

F.A.C.S. Prof.

## Assoc. Profs. of Clin. Surg.:

Brandson, B. J., B.A., M.D.,

C.M., F.A.C.S.

Campbell, A. M., B.A., M.D.,

C.M.

Fletcher, R. D., M.A., M.D., C.M.,

F.A.C.S. (Urology).

Galloway, H. P. H., M.D., C.M.,

F.A.C.S. (Orthop.).

Gibson, A., M.B., Ch.B., F.R.C.S.,

F.A.C.S.

Gunn, J. A., C.B., O.B.E., B.A.,  
M.D., F.A.C.S.

Lehmann, J. E., M.D., F.A.C.S.

Maclean, N. J., M.D., F.A.C.S.

McKenty, J., M.D., C.M., F.A.C.S.

Webster, W., M.D., C.M. (Anæsthetics).

Elkin, S. J., M.D., C.M.

Assoc. Prof. of Oper. Surg.

## Lectrs. in Clin. Surg.:

Gardner, W. A., B.A., M.D., C.M.,

F.A.C.S. (Orthop.).

Gorrell, J. A., B.A., M.D., C.M.,

F.A.C.S.

Hamilton, T. G., M.D., F.A.C.S.

Mann, W. L., B.A., M.D., C.M.

McIvor, N. K., M.D., F.A.C.S.

Musgrove, W. W., M.D., C.M.,

F.A.C.S.

Waugh, O. S., M.D., C.M., F.A.C.S.

Murray, A. A., M.D., F.A.C.S.

(Orthop.).

## Lectrs. in Surg.:

McEachern, J. D., M.D.

McIntyre, D. F., M.D., F.A.C.S.

Fahrni, G. S., M.D., F.A.C.S.

5 Demrs.

*Therapeutics, v. Medicine*

**AFFILIATED COLLEGES** represented on the Council, the first four having power to confer degrees in Divinity:

ST. BONIFACE COLLEGE, St. Boniface (R.C.). Rector—H. Bourque, S.J. (Building destroyed by fire, Nov. 25, 1922.)

ST. JOHN'S COLLEGE, Winnipeg (C. of E.). Warden—Rev. G. A. Wells, C.M.G., B.A.; Registrar—W. Burman, B.A.

MANITOBA COLLEGE, Winnipeg (Presb. Ch. in Canada). Principal—John MacKay, M.A., D.D.; Registrar—Prof. J. Dick Fleming, Ph.D.

WESLEY COLLEGE, Winnipeg (Meth. Ch. in Canada). Principal—J. H. Riddell, D.D., LL.D.; Registrar—A. Stewart Cummings, B.A.

MANITOBA LAW SCHOOL, Winnipeg. Chairman of Trustees—Hon. H. A. Robson, LL.D.; Dean—J. T. Thorson, B.A. Ox., LL.B.; Recorder—R. J. Russell.

MANITOBA AGRICULTURAL COLLEGE, St. Vital. Acting President—Prof. C. H. Lee, M.A.; Registrar—Prof. G. A. Sproule, B.A.

## GENERAL INFORMATION (v. also p. 280)

Established in 1877 mainly as an examining and degree-conferring body, the Univ. was in 1900 empowered to give instruction. In 1917 a Board of Governors, appointed by the Lieut.-Govr., was constituted, and the functions of the Univ. Council, until then the governing body and composed largely of representatives of the affiliated Colleges, were limited to general charge of the academic work. The Univ. has the sole power of conferring degrees in Arts, Science, Law, Med., Engin., Pharmacy, Agric., and Archit. in the province. It received in 1898 from the Dominion Govt. a land grant of 150,000 acres.

Winnipeg, the capital of Manitoba, with its environs, including the neighbouring city of St. Boniface, has a population of over 270,000. The Univ. at present occupies a site in the heart of the city, but a new site on the outskirts has been selected. The Agric. Coll. at St. Vital, 7 miles distant, has a farm of 450 acres.

**LIBRARY**, 31,500 vols.; 439 periodicals received. In the Medical building is housed the library, 2000 vols. of the Manitoba C.P.S. **LABORATORIES**: Anat., Bact., Bot., Chem., Engin. (Material testing—200,000 lbs., Cement, Elec.), Geol. and Mineral., Path., Physics, Physiol., Zool. **MUSEUMS**: Anat., Embry., Bot., Geol., Path. **HOSPITALS** available for clinics: 2 general (1000 beds) and several special, including tuberculosis.

**FACULTIES.** (1) An Arts and Science Faculty providing instruction in all subjects of undergraduate courses in Arts (except 4 options), Science, and Phm. (2) Medicine. (3) Engineering and Archit. Other subjects of Arts course and Law, Agr., and Home Ec. are taught in the affiliated Colls.

**MATRICULATION** examns. are conducted in June by the Provincial Educ. Dept. and in Sept. by the Univ. It is not necessary to pass completely at one time, and a candidate may enter on a Degree course, except in Law or Med., as a conditioned student. The subjects of Matricn. examn. for Arts or Science courses are English, Hist., Maths., Latin or Greek or French or German; a second language or 2 of the following—Physics, Chem., Genl. Science I., Genl. Science II.; a third language or 2 sciences not already taken, or 1 science not already taken with Home Econ. or Indust. Arts or Music or Agric. or Comml. work. For a period of 3 yrs., 1921 to 1923 incl., no examns. will be required for Matricn. standing in the subjects of Part I. (Grade X.) Matricn. from pupils of the Collegiate Institutions of the province, or of the Preparatory schools in connexion with the affiltd. Colleges, where recommended for such exemption by their school principals. Entrance requirements for Medicine are clear standing of two pre-medical years; for Law standing of 2nd year in Arts, with Latin to the end, at least, of the 1st yr.; and for Engineering standing of one pre-engineering year. Members of any British or approved Univ. may be admitted *ad eundem statum* or *gradum* without Entrance examn.

**DEGREE COURSES.** 4 yrs.—B.A., B.Sc., B.Sc. (C.E. or E.E.), B.Sc. (Phar.), B.Arch.; 3 yrs., following 2nd yr. in Arts or its equivalent—LL.B.; 5 yrs., following 2 pre-medical yrs.—M.D.; 5 yrs.—B.S.A., B.H.Ec.; 8 yrs.—combined B.Sc.-M.D. Graduates in Med. of at least 2 yrs.' standing with certain prescribed training and experience may obtain C.M. on passing written, oral, and pract. examn.

**ATTENDANCE** at lectures is obligatory for all except extra-mural students. Extra-mural students may not take courses in Med., Sc., Arch., or Engin., or any course in Arts involving oral, practical, or lab. work, nor may they appear at examns. without permission of the Bd. of Studies. Extra-mural registra-

tion in Arts is limited to students resident in Manitoba, and a minimum of 1 yr.'s attendance at this or another approved Univ. is exacted before the B.A. is conferred.

The 1st yr. of the B.A. course includes 5 subjects, of which English, Maths., and a foreign lang. (already taken for matricn.) are compulsory; the 2nd—5, including English, Hist., and the same lang. One Science subject must be taken in the 1st or 2nd yr. unless both Physics and Chem. were taken for matricn.

The M.A. may be obtained by an extra year of full-time study under the direction of a committee of instructors. A thesis is required as well as examn.

The M.Sc. requirements are at least one yr.'s grad. work in one or more of the Sc. depts. of the Univ. (incl. Maths.) or in the dept. of Civil Engin. or that of Elect. Engin., an examn. and a thesis. While taking the LL.B. course a student may simultaneously obtain the Law Society's qualification for practice. Extra-mural courses may be taken by law students residing in Manitoba elsewhere than in Winnipeg or environs, and by graduates in Arts of an approved Univ. residing elsewhere. The LL.D. is honorary.

In the B.Sc. Engineering courses summer work and thesis relating thereto are required.

2 yrs.' service in an Architect's office following graduation (B.Arch.) will qualify for licence to practise.

**DIPLOMAS.** Pharm. Chem. (2 yrs.' course); Agr. (3 yrs.) given by Man. Agric. Coll. In *Dentistry* the Univ. is the sole examining body in the province. The Univ. conducts examns. for admission to the Man. Assocn. of Graduate Nurses, to the practice of *Accountancy* and membership of the Inst. C.A. of Manitoba, to the practice of *Architecture* and membership of the Man. Association of Archts.; also qualifying examns. for the Man. Civil Service.

**FEES.** Tuition and examn. in Arts and Sc., \$60 p.a.; Engin. and Arch., \$90; Phm., \$85; Med., \$160; Law, \$83. Licence to practise Med., \$100. Agr. Dipl. course, \$38; Degree course, \$38 (1st and 2nd yrs.) and \$63 (3rd, 4th and 5th yrs.).

**SCHOLARSHIPS** for graduates: \$600 p.a. for 2 yrs., open to graduates in special courses in Arts, in Med., or Engin., every alternate year, tenable at some other seat of learning; Fellowship, \$500 awarded annually in Hist. and Pol. Sc.; Research Fellowship, \$1500 annually in Sc.

**RESIDENCE.** Hostels at all affiliated Arts Colls. and Agr. Coll.

**INTERCHANGE** of teachers for a few days and conference annually with Univs. of N. Dakota and Sask.

**ADULT EDUCATION**, v. *infra*.

**PUBLICATIONS.** *Calendars* (July), General, Matricn., and several faculties free; *Manitoban* (students' paper), weekly; *Annual Report*, Historical notes (1877-1917); *Examn. Papers*, \$1.

## THE YEAR 1921-22

**BENEFACTIONS.** Govt. Grants, \$254,000 for maintenance, \$125,000 for additional buildings for Arts classes; Assocn. of Prof. Engineers, \$150 p.a. scholarship; anon., \$50 prize in Archit.

**NEW POSTS.** Asst. Profs. of Anat., Engl., French, Maths.

**OTHER DEVELOPMENTS.** Matriculation standard raised; entrance requirements for courses in Agr. and Home Economics raised; regns. for LL.B. revised; courses in Sociology and Religious Education introduced; Univ. book-store established; combined course, 8 yrs., for B.Sc., M.D.

**RETIREMENTS.** D. L. Durkin; H. R. Kingston, apptd. Prof. in Western (Ont.). **DEATHS.** C. C. Field, G. F. Coombes.

**HONORARY DEGREES.** LL.D.—A. B. Baird, J. Blain, R. Fletcher, A. Stewart. Conferred in 1920-21: S. A. Bedford, R. J. Blanchard.

**OTHER DEGREES** (1920-21 and 1921-22). B.A.—79, 87 (34, 44 women); B.Sc.—5, 4 (0, 2 w.); B.Sc. in C.E.—8, 7; B.Sc. in E.E.—8, 6; B.S.A.—20, 13; B.Sc. in Phar.—1, 0; B.Arch.—1, 0; B.H.Ec.—8 w., 6 w.; LL.B.—31 (2 w.), 42; M.D.—34 (2 w.), 29 (2 w.); C.M.—5, 3; M.A.—10 (3 w.), 11 (5 w.); M.Sc.—1, 2 (1 w.); Dipl. in Phar.—21 (1 w.), 10.

**NUMBER OF STUDENTS.** In undergraduate courses in Arts and Science—1018 (451 women); Medicine—307 (31 w.); Phar.—38 (2 w.); Engin. and Arch.—138; Law—111 (3 w.); Agr.—73; Home Ec.—62 w.; for M.A.—37 (15 w.); for M.Sc.—3 (1 w.); Spec. students in Arts—107 (46 w.); in Evening and other Extension courses—617. Total—2511.

**ADULT EDUCATION.** Evening Business courses have been offered each winter, beginning with 1917-18, in subjects such as Accountancy, Comml. Law, Business English, Business Arith., Life Insurance, etc., part of the instruction being given by members of the regular Univ. teaching staff; open to both men and women: in 1921-22, 8 instrs. and 240 students. Short course for Retail Merchants (the 5th), lectures, conferences, and class work, designed to meet the needs of merchants: this was preceded by a somewhat similar course at Brandon. Course in Rural Economics by a professor from Toronto Univ., supplemented by a varied course by profs. of this Univ., of Man. Agr. Coll., and others. Short Course on Mining Geol., 7 lectures by the members of the staff of the Dept. of Geol. and Mineral. Short post-grad. courses in Med. and Surg. attended by 40 practising physicians and surgeons. 40 popular lectures in Winnipeg and 105 in 55 places outside Winnipeg.

# MONTREAL UNIVERSITY

PATRON—S.E. Cardinal G. VAN ROSSUM.

CHANCELLOR—S.G. Mgr. P. BRUCHÉSI, D.Th., Archbishop of Montreal.

RECTOR—S.G. Mgr. G. GAUTHIER, D.Th., LL.D., Bishop of Philppolis.

PRESIDENT—Sir LOMER GOVIN, LL.D., K.C.M.G.

PRESIDENT OF THE EXECUTIVE COMMITTEE—Hon. F. L. BÉRIQUE, LL.D.

VICE-RECTOR—Canon E. CHARTIER, M. ès A., L. ès L., D.Ph.

SECRETARY-GENERAL—E. MONTPETIT, B.A., LL.D., D.S.P. Paris.

TREASURER—O. ARCHAMBAULT.

LIBRARIAN—A. FAUTEUX, B.A.

## PROFESSORS, LECTURERS, ETC., October 2, 1922

<i>Agriculture</i> , v. Affiliated Instns.	<i>Chemistry</i> , v. also Affiliated Instns.
<i>Anatomy</i> , v. also Med. Histology	Baril, G. H., M.D. (Bio-Chem.) Prof.
Mignault, L. D., M.D., M.Ch. Prof.	Morin, L. J., L. ès Sc. Paris Dean & Prof.
Delorme, L. N., M.D. Prof.	Nadeau, H., L. ès Sc. Paris Prof.
Latreille, E., M.D. (A. Path.) Prof.	Laplante-Courville, D.Pharm. Prof.
Virolle, E., M.D. Prof.	
<i>Applied Science</i> , v. Affiliated Instns.	<i>Classics</i>
<i>Architecture</i>	Chartier, Can. E., M. ès A., L. ès L. Paris (Prof. of Educn.) Dean & Prof.
Beaugrand-Champagne, A. Prof.	Dombrowski, H., Ag. des L. Paris (Prof. of French Lit.) Prof.
Dyonnet, E. Prof.	Maurice, P., D.D. Prof.
Larue, A. Prof.	<i>Commerce</i> , v. Affiliated Instns.
Poivert, J., D.Arch. Paris Prof.	<i>Dental Science</i>
<i>Art, History of</i>	Dubeau, E., D.C.D. Dean and Prof.
Lagacé, J. B., M.A. Prof.	Nolin, J., D.C.D. Prof.
<i>Astronomy</i>	Gendreau, J. G. A., D.C.D. Prof.
Choquette, Mgr. Prof.	Duhamel, J. A., M.D. Prof.
<i>Biology</i> [Prof.]	Dufresne, G. A. H., M.D. Prof.
Dalbis, L. J., D. ès Sc. Paris	9 Profs. agrégés, 3 Hony., 11 Clinicians and Demrs.
<i>Botany</i>	<i>Economics</i> , v. Social Sciences
Victorin, Marie Prof.	
Pelletier, A., D. ès S. (Prof. of Maths.) Prof.	

<i>Education</i> , v. Classics	Dollo, A. (Prof. of Mech. Engin.)
<i>Engineering</i> , v. Affiliated Instns.	Prof.
<i>English Lang. and Lit.</i>	<i>Physiology</i>
Atherton, W., LL.D. Prof.	Asselin, E. G., M.D. Prof.
<i>French Literature</i> , v. Classics	<i>Social Sciences, Economics, and</i>
<i>Geology</i> , v. Affiliated Instns.	<i>Politics</i>
<i>Hebrew</i> , v. Theol.	Montpetit, E., K.C., LL.D., D.S.P.
<i>History</i>	Paris.
Désy, J., L. ès L., D.S.P. Paris	Prof. of Econ., Pub. Finance
Prof. of Comml. and Genl. H.	and Statistics, Director of
Groulx, L., M.A., D.Th. Prof.	the School.
Aucoin, E., M.A. Prof.	Perrin, L. Prof.
<i>Household Science</i>	Surveyer, A. Prof.
Anctil, Miss J. Prof.	Desy, J. (v. Hist.) Prof.
<i>Italian</i>	Dore, V. Prof.
Nelli, G. Prof.	Gouin, L. M. (v. Law, Ind.) Prof.
<i>Law</i> , v. <i>infra</i>	Vanier, G. Prof.
<i>Mathematics</i> , v. also Botany	Pelletier, G. (Journalism). Prof.
Beaupré, V. E., B.A. Prof.	Fauteux, N. (Journalism). Prof.
Léveillé, A., B.A. Lond.	Rinfret, F. (Journalism). Prof.
Prof. (Finance).	Leduc, A. (Journalism) Prof.
<i>Medicine</i> , v. <i>infra</i>	4 Profs. agrégés.
<i>Mineralogy</i> , v. Applied Sc.	<i>Spanish</i>
<i>Modern Languages</i>	Gonzalès, B. Prof.
Jasmin, H., D.Ph., D.Th. Prof.	<i>Theology</i>
<i>Music</i>	Allard, R., D.Th. Prof.
Charbonneau, J. N.	Belcourt, E. Prof.
Head of Schola Cantorum.	Dorvaux, J. E., D.Th., D.Dr. Can.
<i>Philosophy</i>	Prof.
Perrin, L., D.Th., D.Ph., M.A.	Dubeau, A. Prof.
Dean and Prof.	Duchain, F., D.Th. Prof.
Pineault, L., D.Th., D.Ph., M.A.	Filion, E. Prof.
Prof.	Gattet, B. M., D.Th. Prof.
Forest, C., Ph.M. Prof.	Gauthier, H., D.Th. Prof.
Gauthier, O., D.Th., Ph.D. Prof.	Jeannotte, H. J., D.Th. Prof.
Fauteux, A., LL.L. Prof.	Lesieur, R. Prof.
Perrault, A., LL.D., K.C. Prof.	McShane, G., D.Th. Prof.
<i>Physics</i>	Many, N. V., D.Th. (Hebrew) Prof.
Gendreau, E., L. ès Sc. Paris,	Savignac, E., D.Th. Prof.
Ph.D., M.D.	Urique, P., D.Th. (Dean) Prof.
Prof. of P. and of Bio-P.	Yelle, E. Prof.
Demers, J., B.A. Prof.	<i>Veterinary Science</i>
	Daubigny, T., M.V.
	Director of the School & Prof.
	Généreux, D., M.V. Prof.
	Lorrain, L. P. H., M.V. Prof.
	Dauth, A., M.V. Prof.
	6 Profs. agrégés.

## Law

*Administrative L.*

Baudoin, G., L. en Dr. Prof.

*Civil L.*

Demers, Hon. L. P., LL.D.,

J. of High Ct. Prof.

Lafontaine, Hon. E., LL.D.,

J. of High Ct. (Dean) Prof.

*Civil Procedure* [Prof.]

Taschereau, R., LL.D., K.C.

Genest, R., L. en Dr. Lectr.

*Comm. and Marit. L.*

Lacoste, Sir A., LL.D. Prof.

Perrault, A., D. en Dr., K.C. Prof.

Gérin-Lajoie, A., LL.D. Lectr.

Faribault, R., L. en Dr. Lectr.

*Const. and Munic. L.*

Cousineau, Hon. P., LL.D., J. of

High Ct. Prof.

*Criminal L.* [Prof.]

Morin, L. J. S., LL.D., K.C.

*Industrial Legn. and Civ.**Comm. and Indust. L.*

Pérodeau, Hon. N., LL.D. Prof.

Gouin, L. M., L. en Dr., B.A.

Lectr.

*Internat. L. and Hist. of L.*

Lemieux, Hon. R., LL.D., K.C.

Prof.

*Notarial Procedure*

Morin, V., LL.D. Prof.

*Roman L.*

Beaulieu, E., LL.D., K.C. Prof.

Medicine (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Bacteriology*

Bernier, A., M.D. Prof.

Aubry, H., M.D. Lectr.

*Contagious Diseases*

Leduc, J., M.D. Prof.

Delvecchio, P., M.D. Prof.

Lebel, A., M.D. Lectr.

*Deontology and Clin. Surg.*

Saint-Jacques, E., M.D., B.A. Prof.

*Dermatology and Syph.*

Décarie, J. D., M.D. Prof.

Archambault, G., B.A., M.D.

Prof.

Toupin, J. R., M.D. Lectr.

*Gynæcology* [(Dean) Prof.]

Harwood, L. de L., M.D.

Ethier, A., M.D. Prof.

Trudeau, R., M.D. Prof.

*Histology and Path. Anat.*

Dalbis, L. J., D.S. Paris Prof.

Saint-Pierre, C., M.D. Lectr.

Jutras, L., M.D. Lectr.

*History of Med.*

Saint-Pierre, A., M.D. Prof.

*Hygiene*

Valin, C. N., M.D. Prof.

Baudouin, J. A., M.D. Prof.

*Legal Med.*

Derome, G. W., M.D. Prof.

*Medicine, Clinical*

Guérin, J. J., M.D., M.Ch., LL.D.

Dub., K.C.St.Gr. Prof.

Benoit, E. P., M.D., O.A. Prof.

Bruneau, T., M.D. Lectr.

Lebel, H., M.D. Lectr.

Léger, A., M.D.

Lectr. (C.M. &amp; Path.).

Rouleau, A., M.D. Lectr.

Beauchamp, G. E., M.D. Lectr.

Verner, L., M.D. Lectr.

*Mental Diseases*

Tétreault, A., M.D. Prof.

Lefebvre de Bellefeuille, G., M.D.

Lectr.

*Neurology*

Prévost, A., M.D. Prof.

*Obstetrics*

De Cotret, E. A. R., M.D. Prof.

Langevin, S., M.D. Lectr.

*Ophth., Ot. and Rhino-Lar.*

Foucher, A. A., M.D., O.I.P. Prof.

Boulet, R., M.D. Prof.

<i>Pathology</i> , v. also Med.	Jarry, A., M.D.	Lectr.
Parizeau, T., M.D. Paris		
Prof. (P. and Clin. Surg.).	<i>Propædeutics</i>	
Lesage, A., M.D., O.A.	Hébert, R., M.D., O.A.	Prof.
Bourgeois, B., M.D.	Prof.	
	<i>Radiology</i> , etc.	
<i>Pediatrics</i>	Panneton, J. E., M.D.	Prof.
Masson, R., M.D.	<i>Surgery, Clinical</i> , v. also Deont.,	
Ricard, A., M.D.	Path.	
Ferron, A., M.D.	Mercier, O. F., M.D.	Prof.
	Marien, A., M.D.	Prof.
<i>Pharmacology</i>	Hingston, D., M.D.	Prof.
Laurence, A. J., L.Ph.	Prof.	
	Demers, A., M.D.	Lectr.
<i>Pharmacy</i>	Gagnon, A., M.D.	Lectr.
Contant, J., D.Ph.	Dufresne, E., M.D.	Lectr.
President of the School & Prof.	Derome, A., M.D.	Lectr.
Lecours, J. E. W., L.Ph.	Ferron, A., M.D.	Lectr.
Laurence, A. J., L.Ph.		
Sec.-Dir. of the School & Prof.	<i>Surg., Operative</i>	
Lancot, H., L.Ph.	Rhéaume, Z., M.D.	Prof.
Vadboncœur, E., L.Ph.	Fournier, N., M.D.	Prof.
Quintin, A. D., L.Ph.	Prof.	
Boutin, J., L.Ph.	<i>Therapeutics</i>	
Flahaut, J., L. ès S. Lille.	Masson, D., M.D. Paris.	Prof.
Pilon, H., L.Ph.	Fortier, L. E., M.D.	Prof.
4 Profs. agrégés.	Bourgoin, J., M.D.	Prof.
	Mignault, G. E., M.D.	Lectr.
<i>Physiotherapy</i>	<i>Toxicology</i>	
Dubé, J. E., M.D., O.A.	Rivet, A. N., M.D.	Prof.

## AFFILIATED INSTITUTIONS

AGRICULTURAL INSTITUTE at Oka, about 30 miles from Montreal, founded 1893 by the Trappist Fathers of Oka, and affiliated to Laval in 1908. Director, Prof. Jean de la Croix. 15 other Profs. of *Ag. Botany; Animal Biology and Hygiene; An. Industry; An. Pathology and Bacteriology; Apiculture; Arboriculture; Aviculture; Buildings and Accounts; Chem., Geol. and Mineral; Fruit and Flower Gardening; Kitchen Gardening; Large-scale Farming and Machinery; Maths.; Physics and Drawing; Soils; Zoology and Rural Economy*. 4 other Supts. of Practical Work.

APPLIED SCIENCE, including Engineering. École Polytechnique. Founded in 1874; annexed to the Faculty of Arts of Laval, 1887; subsidized by the Provincial Govt. and the principal Railways of the Dominion. Principal, A. Boyer. 24 Profs. of *Architecture, Chemistry, Drawing, Electricity, Electro-technics, Electrochem., Electro-met., Engineering—Civil, Elec., Mech. and Sanit., Geodesy, Geology, Geometry, Heating, Hydraulics, Industrial Chem., Industrial Legisln., Indust. Technology, Maths., Metallurgy, Mineralogy, Mining, Physics, Railways, Surveying, Thermodynamics, Ventilation*. 14 Hon'y. Profs.

COMMERCE. École des Hautes Études Commerciales. Created by the Provincial Govt. in 1907 and affiliated to Laval in 1915. Director, Prof. H.



Laureys. 17 other Profs. of *Accountancy, Banking, Chemistry, Customs Legislation, Economics, English, French, Geography, History, Insurance, Italian, Law, Maths., Math. Physics, Publicity.* 3 Hony. Profs.

CONSERVATOIRE NATIONAL DE MUSIQUE. Recently affiliated.

ENSEIGNEMENT SECONDAIRE OU CLASSIQUE. Ten Colleges for boys are affiliated to the Univ. under conditions providing for a 4 yrs.' High School course followed by a 4 yrs.' College or Arts course, on the completion of which a student may qualify by examn. for a diploma admitting him to professional studies in the Univ. The École d'enseignement secondaire pour les Jeunes Filles provides similar College courses for girls organized in French, English, and Special (Arts d'Agrement, Commerce, Pol. and Soc. Econ., Domestic Science) sections.

## GENERAL INFORMATION (v. also p. 280)

Established, as a branch of Laval, Quebec, in 1878, with Faculties of Theology and Law, to which were added Medicine in 1879 and Arts in 1887. Since 1889 this Institution has been practically independent of, though receiving its degrees from, Quebec, and on Feb. 14, 1920, it was incorporated under its present name by an Act of the Provl. Legislature. The general administration is conducted by a Senate, Commissions of Admn. and Studies, Univ. Council and Exec. Committee. Endowments: \$4,000,000 from a national subscription (1920), \$1,000,000 from the Provl. Govt., and \$1,000,000 from the Seminary of St. Sulpice.

LIBRARY, 120,000 vols. Each Faculty and School has the necessary teaching collections and laboratories.

FACULTIES. Theol. (constituted by the Grand Seminary of St. Sulpice); Philosophy; Law; Med.; Letters; Sciences; Dental Science. Incorporated in the Univ. are Schools of Vet. Med., Pharmacy, and Social, Econ. and Polit. Science.

DEGREES AND DIPLOMAS. Courses in the incorporated and affild. institns. include—a 4 yrs.' course in the Éc. Polyt., for the B. ès Sc. App.; 3 yrs. in the Éc. de Méd. Comp. for the D. en Méd.Vét.; 4 yrs. in the Éc. de Ch. Dent. for the D. en Ch.D.; 4 yrs. in the Éc. de Phm. for the B. en Ph. and D. en Ph.; 4 yrs. in Inst. Agric. d'Oka for the B. en Agr. and D. en Sc.Agr. 3 yrs. in the Éc. des H.E. Comm. for a Diploma.

## THE YEAR 1921-22

NUMBER OF STUDENTS. Theol., 297; Philos., 138; Law, 122; Med., 291; Pure Sciences, 81; Letters, 178; Dent. Chir., 207; Vet. Surg., 20; Pharm., 146; Soc. Sc., 64; Engin., 125; Comm., 276; Agr., 120; Inst. d'Ens. Mod., 150; Music, 785; Household Sc., 125.

# MOUNT ALLISON UNIVERSITY, SACKVILLE, N.B.

CHAIRMAN OF THE BOARD OF REGENTS—GEORGE STEEL, D.D.  
 PRESIDENT OF THE SENATE—B. C. BORDEN, D.D., D.C.L.  
 SECRETARY AND LIBRARIAN—Prof. F. W. W. DES BARRES, B.A.  
 REGISTRAR OF THE FACULTY OF ARTS—Prof. W. M. TWEEDIE, M.A.

## PROFESSORS, LECTURERS, ETC., October 27, 1922

<i>Biology</i>		<i>Mathematics</i>	
Fraser, R., B.S. Guelph., M.A.		Hunton, S. W., M.A.	Prof.
Tor.	Prof.		
<i>Chemistry</i>		<i>Physics</i>	
Bigelow, H. E., Ph.D. Harv.	Prof.	MacGregor, D. G., B.A., B.Sc. Ox.	[Prof.
		Button, J. W., B.Sc.	Instr.
<i>Classics</i>		<i>Political Sciences</i>	
Cphoon, J. W., Ph.D. Princeton		President Borden	Black Prof.
	Wood Prof.		
<i>Engineering</i>		<i>Psychology and Logic</i>	
McKiel, H. W., B.A., B.Sc. Qu.		Liddy, R. B., B.D., Ph.D. Tor.	
(Mech.E.)	Prof.		Massey Prof.
West, F. L., M.A., B.Sc. McG.		<i>Theology</i>	
	Prof.	Line, J., M.A. Tor., S.T.D. Wes.	
<i>English Lang. and Lit.</i>		Montreal.	Allison Prof.
Tweedie, W. M., M.A. Lond.		Watson, W. G., B.A. Tor., B.D.	
	Allison Prof.	Victoria (Hebrew and Engl.	
<i>French and Greek</i>		Bible)	Prof.
Delano, C. C., Ph.D. New York	[Prof.	DesBarres, F. W. W., B.A. (Church	
		Hist.)	Prof.

## GENERAL INFORMATION (v. also p. 280)

The METHODIST CHURCH of Canada controls the administration, which is, however, conducted on strictly non-sectarian principles; a considerable number of the students belong to other religious denominations. The Univ. is named after C. F. Allison, founder (in 1843) of "Mt. Allison Wesleyan Academy," the Trustees of which were, by an Act of the Legislature of N.B. in 1858, authorized to establish as a degree-conferring institution, "Mt. Allison Wesleyan College." This name was changed in 1886 to "Univ. of Mt. Allison Coll." and in 1913 to "Mt. Allison Univ." In 1903 the McClellan School of Applied Science was opened in the Univ.

LIBRARY, 15,000 vols. Engineering WORKSHOPS with gasoline engine, etc.

FACULTIES. Arts, Science, Theology, School of Applied Science.

DEGREE COURSES. 3 yrs., B.Mus.; 4 yrs. (from "Junior" Matricn.),

B.A., B.Sc. "Senior Matricn." Certifs. (*e.g.* N.S. Provl. High School, grade A) admit to 2nd yr. of B.A. or B.Sc. course; Prince of Wales Coll. High Honour Diploma to 3rd yr. V. also p. 283.

HIGHER DEGREES. Open to B.A. of 1 yr.'s standing, M.A.; 2 yrs.' B.D.; to B.Sc. of 1 yr.'s standing, M.Sc.; Honorary, D.D., LL.D., D.C.L.

CERTIFICATES. Applied Science, 2 yrs.' course (may be taken as part of 3rd and 4th yrs. of B.A. course); Finance and Com., 2 yrs.; Probationers for Ministry, 3 yrs.

RECOGNITION by other Univs. (v. pp. 48, 301, 314).

FEES, tuition and registration, annual: Arts, \$80; Engin., \$120.

RESIDENCE. Accommodation in the Univ. for 130 men and 60 women students. Board and lodging, \$249 p.a.

PUBLICATIONS. *Calendar* (July); *Argosy* (students'), and *Mt. Allison Record*, monthly.

## THE YEAR 1921-22

NUMBER OF STUDENTS. Full-time, preparing for Bachelorship or Diploma, 195 (including women, 44); for M.A. or M.Sc., 3; Occasional or Special, 67 (women, 52).

DEGREES CONFERRED. B.A., 18 (including women, 10); B.Sc., 12; M.A., 3; Engin. Certif., 14; Theol. Certif., 7.

# UNIVERSITY OF NEW BRUNSWICK, FREDERICTON

VISITOR ON BEHALF OF H.M. THE KING—THE LIEUT.-GOVERNOR OF  
NEW BRUNSWICK.

CHANCELLOR—C. C. JONES, M.A., Ph.D., LL.D.

PRESIDENT OF THE SENATE—W. S. CARTER, M.A., LL.D., D.C.L.

REGISTRAR—HAVELOCK COY, M.A.

## PROFESSORS AND LECTURERS, August 1922

<i>Chemistry</i>	[Prof.	<i>French and German</i>	
Cameron, A., M.A., B.Sc. St. And.		Klimpke, P., M.A. Yale.	Prof.
<i>Classics and Anc. Hist.</i>		<i>Law</i>	
Raymond, W. T., B.A., B.A.		Richards, C. D., B.A. (Contracts	
Harv., LL.D. Dal.	Prof.	and Const. Hist.)	Lectr.
<i>Engineering</i> , v. also Phys.		Hughes, P. J., B.A. (Torts, Crimes)	
Turner, E. O., S.B. Mass. I. Tech.			Lectr.
(Civil E.)	Prof.	<i>Mathematics</i>	
Stephens, J., M.A., M.A.I. Dub.,		The Chancellor	Prof.
M.I.C.E.I. (Mech. E. and			
Drawing)	Prof.	<i>Natural History and Geol.</i>	
Claridge, B. E., Ph.B., M.F. Yale		Cox, P., B.A., B.Sc., Ph.D.	Prof.
(Forest Engineering)	Prof.		
<i>English and Mod. Hist.</i>		<i>Philosophy and Economics</i>	
Harvey, E. L., B.A. Ox.	Prof.	Kierstead, W. C., Ph.D. Chic.,	
<i>Forestry</i>		M.A.	Prof.
Pulling, A. V. S., B.Sc. N.Y. State		<i>Physics and Elec. Engin.</i>	
Coll. For.	Prof.	Baird, A. F., M.Sc.	Prof.

## GENERAL INFORMATION (v. also p. 280)

The "College of New Brunswick" was incorporated in 1800 by Provincial Charter, re-incorporated in 1828 by Royal Charter as "King's College," and merged in 1859 in the Univ. of N.B. established in that year. The Provincial Govt. appoints the Chancellor and a majority of the governing body, called the Senate, of which the Chief Supt. of Education for the Province is *ex officio* President. The annual grant from Provincial revenues is \$25,000.

**LIBRARY**, 14,000 vols. **MUSEUMS**, Natural History (rich in birds). **LABORATORIES**: Bot., Chem., Engin., Geol., Phys., Psych. **OBSERVATORY**: Telescope with 6" clear aperture.

**DEPARTMENTS**. Arts, Applied Science (Engineering and Forestry).

DEGREE COURSES. 4 yrs. (from "Junior" Matricn.), B.A., B.Sc. (in Pure Science, Engin. or Forestry). The "Senior" Matricn. (or equivalent) Certif. admits to the 2nd year. The first 2 yrs. in Engin. are arranged to suit candidates for licences as Land Surveyors. The Forestry and Civ. Engin. courses may be combined in 5 yrs.

HIGHER DEGREES. Open to B.A. of 2 yrs.' standing, M.A.; to B.Sc. in Pure Science of 2 yrs.', in Engin. or For. of 3 yrs.' standing, M.Sc.; to B.A. of 6 yrs.' standing, B.C.L.; to B.C.L. of 5 yrs.' standing, D.C.L.; D.Litt., D.Sc., LL.D. (Hon.).

RECOGNITION by other Univs. (v. pp. 48, 266, 301).

FEES, tuition, annual: Arts, \$70; Engin. or Forestry, \$100.

## THE YEAR 1921-22

BENEFACTIONS. \$1500, Electrical Equipment; \$250, Historical Pictures; \$500, Books.

NUMBER OF STUDENTS. Full-time, preparing for B.A. or B.Sc.—165 (including 35 women).

HONORARY DEGREES. LL.D.—Hon. W. E. Foster, Wm. C. Cushing; M.Sc.—F. P. Vaughan.

OTHER DEGREES. B.A.—10; B.Sc.—11; M.A. and M.Sc.—1.

# UNIVERSITY OF OTTAWA

APOSTOLIC CHANCELLOR—H.G. The Archbishop of Ottawa.

RECTOR—F. X. MARCOTTE, D.D., D.Ph.

SECRETARY—A. JASMIN, Ph.D.

TREASURER—A. D. MCGOWAN, B.L.

PREFECT OF STUDIES—J. A. LAJEUNESSE, M.A.

PREFECT OF DISCIPLINE—R. LEGAULT.

## PROFESSORS, October 1922

[a = Arithmetic, c = Classics, e = English, f = French, h = History,  
m = Mathematics, r = Religious Knowledge.]

- |                                    |                                    |
|------------------------------------|------------------------------------|
| Allard, O.—f, h, r.                | Lajeunesse, J. A., M.A.—Nat. Sc    |
| Arsenault, A. J.—c, e, h, r.       | Lamoureux, R., Ph.D.—r.            |
| Belleau, P. H.—r, Physics.         | Latulipe, E.—a, r, Business.       |
| Bergevin, L.—c, r.                 | Leblanc, R.—Philos.                |
| Bourassa, A., D.D.—r.              | Leclerc, A.—f, m.                  |
| Bradley, F.—e, h, r.               | Legault, R.—Business.              |
| Brosseau, H. D.—e, f, h, m, r.     | Lesage, L.—m, Penmanship.          |
| Cary, A.—e, f, r, Econ.            | McFarland, J. J. M., B.A.—e, m.    |
| Chartrand, J.—e, f.                | Marchand, G., Ph.D.—r.             |
| Choquette, F.—c, r.                | Martel, G.—m, r, Biol.             |
| Cornellier, P., B.A., Ph.D., Th.D. | Ménard, H.—e.                      |
| —r.                                | Morisseau, H.—f, h, r.             |
| Côté, V.—f, r.                     | Nadeau, L.—c, m.                   |
| Deneau, U.—Geog., Penmanship.      | Nilles, N., D.D.—c, Econ., r.      |
| Desmarais, R.—Geog., r.            | Paquette, A.—f, r.                 |
| Desnoyers, A., Ph.D.—r.            | Pelchat, J.—h, m, r.               |
| Dubé, H., Ph.D., M.Sc.—m,          | Pelletier, A.—c, f.                |
| Physics, Astron.                   | Perruisset, L., D.Ph.—h, Philos.   |
| Dubois, N.—c, m, r.                | Poulet, D., L.Ph.—Philos., r.      |
| Emond, H., B.A.—a, c, f, Pen-      | Poupore, L.—e, Penmanship.         |
| manship.                           | Quigley, F. J.—e.                  |
| Fusey, A.—c, f.                    | Renaud, E.—Chem., m.               |
| Gravel, J.—c, f, r.                | Rhéaume, L.—r.                     |
| Guertin, A.—f, h, r.               | St-Denis, R., B.A.—e, f, h, Geog., |
| Guy, J.—m.                         | Penmanship.                        |
| Jacques, A.—c.                     | St-Georges, L.—c, f, Music.        |
| Jasmin, A.—h, r.                   | Sénécal, R.—Business.              |
| Julien, O.—e, f, Geog., Steno-     | Simard, G.—Eccl. Hist.             |
| graphy.                            | Véronneau, A., M.A.—c.             |
| Lahaie, R. C., B.A.—c, e, f, h.    | Villeneuve, R., D.Ph.—r.           |

## GENERAL INFORMATION (v. also p. 280)

The "College of Bytown," incorporated in 1849, changed its name in 1861 to "College of Ottawa," and became in 1866 the Univ. of Ottawa with power to grant degrees. The Univ. is conducted by the Oblate Fathers of Mary Immaculate.

**LIBRARY**, 25,000 vols. The Parliament Library, to which students have access, has 300,000 vols. **MUSEUMS**: In the Univ.—Geol.; access also to Geol. Survey Dept. Museum. The Dominion Observatory and Canadian Fisheries Museum are located in Ottawa. **LABORATORIES**: Chem., Phys., Mineral.

**DEGREES, ETC.** B.A., M.A., B.L. (Lit.), B.Phil., B.Th., D.Th., LL.D. (Hon.), Lic. Phil., D.Phil., Lic. Th. The Arts course leading to the B.A. or B.L. covers 4 yrs., the work of the Fourth to the Seventh "Forms," that of the first 3 Forms being preparatory to matricn. Extra-mural students may appear for examn. without attending classes in the Univ. for more than 1 yr. The B.A. exempts law and medical students from Prelim. Examns. and entitles the former to a reduction of 2 yrs. of the ordinary 5 yrs.' course. The B.Th. and the L.Th. involve respectively 2 and 3 yrs.' study of Theology after the completion of a classical course; the B.Ph. and the L.Ph. respectively 3 and 4 yrs.' study after matricn. Marks assigned for the exercises of students are read in public once a month and monthly reports are sent to parents.

**FEES.** For Tuition and Board Residence per half-year, \$300. Degrees from \$5 to \$75.

**RESIDENCE.** Students whose homes are not in Ottawa are required to live in the Univ. building where they are subject to strict discipline—*e.g.* no book or newspaper may be introduced without having been previously examined and approved of by the Prefect of Discipline.

## THE YEAR 1921-22

**NUMBER OF STUDENTS**, in the Faculty of Theology, 64; Philosophy, 59; Collegiate (pre-matriculation) and Commercial course, 763.

**DEGREES GRANTED.** B.A., 20; B.Ph., 19; L.Ph., 12; B.Th., 11; L.Th., 8; M.A., 2; Hon. Degrees, 7.

# QUEEN'S UNIVERSITY, KINGSTON, ONTARIO

CHANCELLOR—E. W. BEATTY, B.A., K.C.

PRINCIPAL AND VICE-CHANCELLOR—R. BRUCE TAYLOR, M.A., D.D., LL.D.

RECTOR—A. E. ROSS, C.M.G., B.A., M.D., LL.D.

VICE-PRINCIPAL—Prof. J. WATSON, M.A., D.D., LL.D., D.Litt.

REGISTRAR AND TREASURER—W. E. MCNEILL, M.A., Ph.D.

LIBRARIAN—. . . . .

DEAN OF WOMEN—Mrs. W. E. MCNEILL, M.A.

## PROFESSORS, LECTURERS, ETC., November 1922.

### *Accounting*

Walker, C. E., C.A. Asst. Prof.

Smails, R. G. H., A.C.A. Asst. Prof.

Ashley, C. A. (Commerce) Asst. Prof.

*Anatomy*, v. also Med.—Obs., Surg.

Matheson, D. C., M.B. Acting Prof.

2 Demrs., 1 Fellow.

*Banking*, v. Pol. Econ.

### *Biology*

MacClement, T. W., D.Sc. Armour Inst., M.A. Allan Prof.

Klugh, A. B., M.A. Asst. Prof.

Earl, R. O., B.A. Asst. Prof.

White, H. C., B.A. Tutor & Demr.

Gillan, F. H., B.A. Tutor.

*Chemistry*, v. also Engin. [Prof.

Neish, A. C., M.A., Ph.D. Col.

Waddell, J., B.A. Dal., B.Sc. Lond., D.Sc. Edin., Ph.D. Heid.

McRae, J. A., M.A., Ph.D., F.I.C. Asst. Prof.

Cadenhead, A. F. G., B.A. Lectr.

Dorrance, R. L., B.A. Tor. Lectr.

### *Chemistry, Biological*

Lothrop, A. P., M.A. Ober., Ph.D.

Col. Prof.

### *Classics*

Callander, T., M.A. Aberd. and Ox.

(Greek) Prof.

Lofberg, J. O., Ph.D. (Latin)

Assoc. Prof.

Jolliffe, R. O., Ph.D. Chic. (Latin)

Prof.

Macdonnell, Mary L., M.A. Instr.

*Economics*, v. Polit.

*Engineering*, v. also Mining

Macphail, A. J., C.M.G., B.Sc.

(General E.) Prof.

Arkley, L. M., M.Sc. (Mech. E.)

Prof.

Goodwin, L. F., Ph.D. Heid.,

A.C.G.I., F.I.C. (Indust. and

Chem. E.) Prof.

Wilgar, W. P., B.Sc. (Civil E.) Prof.

Malcolm, L., M.A., B.Sc. (Munic.

E.) Prof.

Jemmett, D. M., M.A., B.Sc.

(El. E.) Assoc. Prof.

Ellis, D. S., M.A., B.Sc. (Civil E.)

Asst. Prof.

Bain, J. W., M.Sc. McG. (El. E.)

Lectr.



- Rutledge, L. T., B.A.Sc. (Mech.E.)  
Asst. Prof.
- Jackson, A., B.Sc. (Draughting)  
Asst. Prof.
- Davis, R. L., M.S. (El. E.)  
Asst. Prof.
- 8 Tutors, 3 Demrs., 2 Instrs.
- English*
- Seccombe, T., M.A. Ox. Prof.
- Macdonald, J. F., M.A. Prof.
- Roy, J. A., M.A. Edin. Asst. Prof.
- Alexander, H., M.A. Liv. " "
- Gordon, Miss W., M.A. Instr.
- 5 Tutors.
- French*, v. also Rom.
- Hicks, R. K., B.A. Camb., M.A.  
Harv. Assoc. Prof.
- Conacher, W. M., B.A. Lond.  
Asst. Prof.
- Bisson, L. A., M.A. Ox. Lectr.
- McConnell, Mme. B. S. Fellow.
- Laird, Marion Tutor.
- Geology*, v. also Mineral. [Prof.]
- Baker, M. B., B.A., B.Sc., F.G.S.A.
- Rose, B., Ph.D. Yale, B.Sc.  
Asst. Prof.
- German*
- Macgillivray, J., B.A. Tor., Ph.D.  
Leip. Prof.
- Hebrew*, v. also Semitic
- McCree, W. T., M.A. Fellow.
- History*
- M'Arthur, D. A., M.A.  
Prof. of H. and Douglas  
Prof. of Colonial H.
- Prince, A. E., M.A. Ox. and Manc.  
(English H.) Asst. Prof.
- Watt, R., B.A. Ox. Lectr.
- Italian*, v. Romance
- Mathematics*
- Matheson, J., M.A. Prof.
- Gummer, C. F., M.A. Ox.  
Assoc. Prof.
- Miller, Norman, M.A., Ph.D. Harv.  
Assoc. Prof.
- Johnston, K. P., M.A., B.Sc.  
Asst. Prof.
- Newlands, Mrs., M.A. Instr.
- 6 Tutors,
- Medicine*, v. *infra*
- Metallurgy*
- MacKay, G. J., B.Sc. Prof.
- Drury, C. W., B.Sc., Ph.D. (Electro  
M. and Research) Prof.
- Mineralogy* [Prof.]
- Bruce, E. L., B.A., B.Sc., Ph.D.
- Smith, Stanley, M.A. Camb.,  
D.Sc. Durh., F.G.S.  
Asst. Prof. of M. and Geol.
- Mining Engineering*
- Graham, S. N., B.Sc. Prof.
- Philosophy*
- Watson, J., M.A. Glas., LL.D.  
Glas. and Tor., D.D. Knox,  
D.Litt. Mich.
- Charlton Prof. of Moral P.
- Ferguson, A. S., M.A. Ox. and St.  
And. (Mental P.) Prof.
- Symons, N. J., M.A. Ox. Asst. Prof.
- Varnum, D. P., B.A. Fellow.
- Physics*
- Clark, A. L., B.Sc. W.P.I., Ph.D.  
Clark, Dean of Fac. of App.  
Sc. Prof.
- Baker, W. C., M.A. (Expl. P.) Prof.
- Hughes, A. L., B.A. Camb., D.Sc.  
Liv. Research Prof.
- Flammer, E., B.Sc. Calif., Ph.D.  
Harv. Asst. Prof.
- Robertson, J. K., M.A. Tor.  
Assoc. Prof.
- Ball, W. V., B.A.Sc. Lectr.
- 2 Tutors.
- Physiology*
- Melvin, G. S., M.D. Aberd. Prof.
- Ettinger, G. H., B.A., M.D., C.M.  
Lectr. in P. and Embryol.
- Political and Econ. Science*
- Skelton, O. D., Ph.D. Chic., M.A.  
Macdonald Prof.
- Clark, W. C., M.A., Ph.D. Prof.
- Ballard, J. C., M.Sc. N.Y.  
Asst. Prof.
- Mackintosh, W. A., M.A.  
Asst. Prof. of Pol. Sc.
- 3 Tutors in Econ. and Banking.

- Romance Lang. and Lit.*, v. also French  
Campbell, P. G. C., M.A. Ox. Prof.  
Brovedani, J. H., D. ès L. Rennes  
Prof. of Span. & Ital.
- Semitic Langs. and Lit.* [Prof.  
Jordan, W. G., B.A. Lond., D.D.
- Spanish*, v. also Romance  
Hallett, Mildred, B.A. Tutor.
- Medicine** (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)
- Anæsthetics*, v. Surg.
- Bacteriology*  
Reed, G. B., M.A., B.Sc., Ph.D.  
Harv. Prof.  
Hay, W. D., M.A., M.D., C.M.  
Lectr. in Serology.
- Electro-Therapy*, v. Mat. Med.
- Gynæcology*  
Mykls, G. W., M.D. Prof.
- Materia Med.*  
Quigley, J. P., M.A., M.D.,  
M.R.C.S. Eng., L.R.C.P.  
Lond. (Lectr. in Electro-  
Therapy) Asst. Prof.
- Med. Jurispr. and Toxicology*  
Boyce, H. A., M.D., C.M.  
Lectr. in J., Clin. Asst.  
in Med.  
Farrell, J. M., B.A. Lectr.
- Medicine and Clin. Med.*  
Connell, W. T., M.D., M.R.C.S.  
Eng., L.R.C.P. Lond. Prof.  
Gibson, W., M.D.  
Assoc. Prof. of M.  
MacCallum, E. C. D., M.D., C.M.  
McG. Assoc. Prof. of M.  
Hopkins, B. H., M.B. Tor.  
Clin. Asst.
- Jones, W. A., M.D. Westn.  
Clin. Asst. & Historian.
- Obstetrics*  
Williamson, A. R. B., M.A., M.D.,  
M.R.C.S. Eng., L.R.C.P.  
Lond. Prof.  
O'Connor, F. J., M.D., C.M.  
Clin. Asst. & Demr. in Anat.
- Ophth., Ot., Laryng. and Rhin.*  
Connell, J. C., M.A., M.D. Prof.  
Cays, F. A., M.D., C.M. Lectr.  
Connell, H. C., B.A., M.D., C.M.  
Clin. Asst.
- Pathology*  
Miller, J., B.Sc., M.D. Edin., D.Sc.  
Birm. Prof.  
Little, T. R., M.D., C.M. Asst. Prof.
- Pediatrics* [Clin. Asst.  
MacGregor, R. R., M.D., C.M.
- Pharmacology*  
Hall, D. R., M.D., C.M. Fellow.
- Preventive Med.*  
Currie, J. R., M.D. Edin., M.B.  
Glas., D.P.H. Birm. Prof.
- Psychiatry*  
Ryan, E., B.A., M.D., C.M. (Assoc.  
Prof. of Surg.) Prof.  
Cumberland, T. D., M.B. Tor.  
Clin. Asst.
- Surgery*, v. also Psych.  
Mundell, D. E., B.A., M.D. (Prin-  
ciples and Practice) Prof.  
Austin, L. J., M.Ch. Camb.,  
F.R.C.S. Eng. Prof. of Clin. S.  
Gardiner, R. J., M.D., C.M.  
Asst. Prof.  
Keyes, S. J., M.D., C.M. (Lectr.  
in Anæsthetics) Asst. Prof.  
Sparks, J. F., B.A., M.D., C.M.  
Asst. Prof. of S. and  
*Appl. Anat.*  
Bogart, I. G., M.D., C.M.  
Assoc. Prof.

## AFFILIATED COLLEGE

QUEEN'S THEOLOGICAL COLLEGE (Presbyterian). Principal and Prof. of Church Hist. and Hist. of Dogma, S. W. Dyde, D.Sc., D.D., LL.D. 5 other Profs.

## GENERAL INFORMATION (v. also p. 280)

On the initiative of the Presbyterian Church a Royal Charter was granted in 1841 for the establishment of Queen's College, Kingston, funds being provided by grants from the Church and from the Govt. and by private benefactions. To the original Faculties of Arts and Theology were added, in 1854 Medicine, in 1907 Education, and in 1916, by amalgamation with the Univ. of the School of Mining founded in 1893, Applied Science. In 1912 the Faculty of Theology was separately incorporated as "Queen's Theological College" in affiliation with the Univ. but controlled entirely by the Presbyterian Church. In 1920 the Faculty of Educn. was discontinued, the students being transferred to the Teachers' Training College, Toronto. Endowments amount to \$1,800,000.

The administration is vested in a Board of Trustees, composed of Chancellor, Principal and Rector, and representatives of the College, the Faculties, Graduates and Benefactors.

**LIBRARY**, 80,000 vols. (valuable Canadian Historical Section). **MUSEUMS**: Herbarium (35,000 spec.), Geol., Mineral., Ethnol. (rich N. American stone age collection). **LABORATORIES**, including important School of Mines buildings: Biol. (accommodating 220 students), Chem., Geol., Physics, Engineering, Mining, Metall., Mineral. **OBSERVATORY** with 6" telescope. **HOSPITALS**, available for clinics, 2 general, 1 for insane. Easy access to important locomotive shops, dry docks, canal locks, water-power stations, mines, metallurgical works. Exceptional natural facilities for Geol. study.

**FACULTIES**. Arts, Applied Science, Medicine. The Senate includes representatives of the Theol. College also.

**DEGREE COURSES**. 4 yrs. from Junr. Matricn., B.A., B.Sc. (in Engin.—Civ., Mech., Elec., Mining and Metall., Chem. and Metall.—Analyt. and Applied Chem., Mineral. and Geol., or Physics); 6 yrs., M.D., C.M.

Combined courses: 6 yrs., B.A. and B.Sc.; 7 yrs., B.A. and M.D.

For teachers in schools and others unable to pursue the full degree courses in Arts at the Univ. extra-mural instruction is provided by correspondence conducted by a staff of tutors. Attendance at the Univ. during at least one full session, or four full sessions of the summer school, must ordinarily be given (v. also pp. 48, 228, 237).

**HIGHER DEGREES**. M.A. (1 yr. graduate course); M.Sc. (1 yr. course and 2 yrs. professional practice); Ph.D. (3 yrs.); D.Sc. (2 or 3 yrs.); D.P.H. (Doctor of Pub. Health); B.D. (3 yrs.' course or its equivalent); Honorary LL.D., D.D.

**DIPLOMAS**. Banking (examns. held, by arrangement with Canadian Bankers' Asscn., in many centres throughout Canada, admitting to A.C.B.A. and F.C.B.A.); Arts (3 yrs.' extra-mural course); Testamur in Theology (3 yrs.' course).

**FEES** (Class and Examn.) in Arts, \$54 p.a.; Science, \$102 to \$122.

**RESIDENCE**. 2 Hostels for women. Board and lodging, \$8 to \$10 a week.

**PUBLICATIONS**. *Calendars* (by Faculties); *Queen's Quarterly*; *Queen's Univ. Journal*.

## THE YEAR 1920-21

HONORARY DEGREES (in 1921). *LL.D.*—H. E. Baron Byng, R. W. Brock, J. Cappon, C. V. Corless, Sir L. Gouin, Helen Reid, J. B. Turner; *D.D.*—W. G. Back, J. H. Turnbull; *M.Sc.*—J. J. Denny.

OTHER DEGREES (in 1921). B.A. (Pass), 118, including 53 women; B.A. (Hons.), 18 (7 women); M.A., 11 (3 women); Ph.D., 1 (woman); B.A., M.D., 5; B.Com., 2; B.Pæd., 1; B.D., 3; M.D., C.M., 46; B.Sc., 41; M.Sc., 1.

NUMBER OF STUDENTS. In Arts: Intra-mural, 674 (including 218 Summer School students); Extra-mural, 578; Science, 396; Med., 240; Banking, 380.

## THE YEAR 1921-22

BENEFACTIONS. J. Richardson, a stadium; Jock Harty memorial, skating rink with accommodation for 5000 persons (money raised by subscription); central heating plant (Govt. grant).

HONORARY DEGREES. *LL.D.*—Sir Archibald Macdonnell, F. W. Harcourt, G. Edwards, S. F. Kirkpatrick, C. Camsell; *D.D.*—J. D. Byrnes, S. Gould, A. Fitzpatrick, W. T. Wilkins.

OTHER DEGREES. B.A., 133; B.Sc., 48; M.A., 10; M.D., 49.

NUMBER OF STUDENTS. In Arts, 567 (women, 239); Science, 339; Med., 258; Extra-mural in Arts, 742; in Banking Courses, 250; Summer School, 258. Students from outside Canada, 37. Total number of students in 1922, 2654

RETIREMENT. Lois Saunders.

# UNIVERSITY OF ST. FRANCIS XAVIER, ANTIGONISH, NOVA SCOTIA

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REGISTRAR—Rev. P. J. NICHOLSON, Ph.D.

DIRECTOR OF STUDIES—Rev. R. K. McINTYRE, B.Sc.

## PROFESSORS, LECTURERS, ETC., September 22, 1922

*Biology and German*  
Connolly, C. J., Ph.D. Mun. Prof.

*Chemistry*  
McIntyre, R. K., M.A., B.Sc.  
Cath. Univ. of Amer. Prof.  
Tompkins, M. N., B.A., B.A.Sc.  
Tor. Assoc. Prof.

*Classics*  
Smith, H. R. W., M.A. Ox. Prof.  
Campbell, Blaise, B.A.  
Asst. in Latin.

*Economics*  
Macdonald, D. J., M.A., Ph.D.  
Cath. U.A. Prof.

*English Lit. and Modern Hist.*  
Bucknell, W. H., B.A. Lond.,  
M.A. Camb. Prof.

*French* [Prof.  
Bonno, G., Ag. de l'U. de France  
Raiche, J. F., M.A. Assoc. Prof.

*Gaelic Lang. and Lit.*  
..... Lectr.

*Geology and Engineering*  
McPherson, H., D.D., Ph.D. Urb.  
Rome Prof.  
Hachey, H., B.Sc. Asst. in E.

*History, v. Engl.*

*History, Ancient*  
Smith, H. R. W., B.A. Ox. Prof.

*Latin*  
The Vice-Rector Asst. Prof.

*Law*  
Macdonald, A., M.A., Judge C.C.  
Lectr.

*Mathematics*  
O'Connor, F. J., B.A. Harv.,  
B.Sc. M.I.T. Prof.  
Tompkins, J. J., M.A., LL.D. Dal.  
Lectr.

*Philosophy*  
Gillis, D. C., Ph.D., S.T.L. Urb.  
Rome Prof.

*Physics*  
Nicholson, P. J., M.A., Ph.D. J.  
Hopk. Prof.

*Religion*  
Boyle, T. O'R., D.D. Lectr.

## Extension Teaching

The Vice-President, Director, 7  
Prof. on the Staff and 6  
other Lectrs.

## GENERAL INFORMATION (v. also p. 280)

The Univ. was authorized in 1866 to grant degrees, and was endowed with full Univ. powers in 1882. A new Charter was granted in 1909. The Univ. is under the control of the Roman Catholic Church, but there are no religious tests for entrance or for degrees.

**LIBRARY**, 22,000 vols. **LABORATORIES**: Biol., Chem., Geol., Phys.

**COURSES**. 4 yrs., B.A., B.Sc.; 2 yrs., Engineering (gives admission to leading technical colls. of Canada and U.S.A.); graduate 1 yr. course for M.A. (v. also pp. 48, 283, 301, 314).

**EXPENSES**. Board and dormitory, \$6 per week; private room, \$2 per week; tuition for session, \$85; laboratory, \$5 to \$7½; degree, \$5 to \$10.

A "PEOPLE'S SCHOOL," open Jan. to March (8 weeks), provides courses in various Arts, Pure Science, and Agric. subjects. No educational test for entrance.

**PUBLICATIONS**. *Calendar* (July); *Xaverian*, monthly.

## THE YEAR 1921-22

**NUMBER OF STUDENTS**. 224, including 40 women.

**DEGREES CONFERRED**. B.A., 17; B.Sc., 2; M.A., 1.

**UNIV. EXTENSION**. "People's School" attended by 70 students.

# UNIVERSITY OF SASKATCHEWAN, SASKATOON

VISITOR—Hon. W. H. NEWLANDS.

CHANCELLOR—Sir F. W. G. HAULTAIN, LL.D.

PRESIDENT—W. C. MURRAY, M.A., LL.D.

REGISTRAR—A. R. WEIR, B.A.

## PROFESSORS, LECTURERS, ETC., September 15, 1922

<i>Accounting</i>		Ferguson, A. R., B.A. T.C.D.
Neilson, J., B.Acc.	Prof.	Asst. Prof.
<i>Agriculture, v. infra</i>		<i>Economics</i>
<i>Bacteriology and Pathology</i>		Swanson, W. W., M.A. Qu., Ph.D.
Lindsay, W. S., O.B.E., B.A. Dal.,	Prof.	Chic. Prof.
M.B. Edin.		Carrothers, W. A., Ph.D. Edin.
Rea, George, M.B., Ch.B., D.P.H.		Prof.
Belf.	Prof.	<i>Education</i>
<i>Biology</i>		The President, M.A. Edin., LL.D.
Thompson, W. P., M.A. Tor.,		Qu. and Alb. Lectr.
Ph.D. Harv.	Prof.	Wilson, R. A., Ph.D. Qu. Lectr.
Cameron, A. E., M.Sc. Man., D.Sc.		<i>Engineering, v. infra</i>
Aberd.	Prof.	<i>English</i>
Fraser, W. P., B.A. Corn., M.A.		Wilson, R. A., Ph.D. Queen's Prof.
Dal.	Lectr.	Lothian, J. M., M.A. Glas. Prof.
Newton, Margaret, B.A. McG.,		Bayer, Jean G., M.A. Dal.
Ph.D. Minn.	Instr.	Asst. Prof.
Sleggs, G. F., B.Sc. Liverp.	Instr.	Weir, A. R., B.A.
<i>Chemistry</i>		Lectr. in E. and Maths.
Thorvaldson, T., B.A. Man., Ph.D.		Sutherland, J. R., M.A. Aberd.
Harv.	Prof.	Instr.
Manning, R. J., B.A. Tor., D.Sc.		McKenzie, Edith J., B.A. Sask.
Brist.	Prof.	Instr.
Basterfield, S. L., B.Sc. Lond.,		[Prof.]
Ph.D. Chic.	Prof.	<i>French</i>
Grubb, A. C., Ph.D. Chic.		MacDonald, J. A., M.A. Harv.
Asst. Prof.		Muller, C. E., B.A. Lausanne,
Acason, Rosalie, A.R.C.Sc.I. Instr.		B.Sc. Geneva Prof.
Cameron, C. N., M.A. Chic. Instr.		Gallon, Geraldine, M.A. Chic. Instr.
<i>Classics</i>		<i>German</i>
Sullivan, W. G., M.A. Dub. Prof.		Eaton, J. W., M.A. Dub. Prof.
Ramsay, W., B.A. Queen's Prof.		<i>Hebrew</i>
		Munro, M. F., M.A., B.D. Queen's
		Lectr.

*History*

Morton, A. S., M.A. Edin. Prof.  
 Underhill, F. H., B.A. Tor., M.A. Ox. Prof.  
 MacPherson, Elsie, B.A. Tor. Instr.

*Household Science*

Rutter, Ethel Asst. Prof.  
 Patrick, Edith, B.A. Tor., M.A. Col. Instr.

*Law*

[Dean &amp; Prof.]

Moxon, A., B.C.L. Ox.  
 Hebert, J. T., LL.B. Harv. Prof.  
 Estey, J. W., LL.B. Harv. (Torts, etc.) Lectr.  
 Maclean, D., LL.B. Dal., B.Sc. Lectr.  
 Sibbald, A. S., M.A. Tor. (Interpretn.) Lectr.  
 Jordan, H. L., B.A. Tor., K.C. (Munic. L.) Lectr.

*Mathematics*

[Prof.]

Ling, G. H., B.A. Tor., Ph.D. Col.  
 Dines, L. L., Ph.D. Chic. Prof.  
 Barnett, I. A., Ph.D. Chic. Asst. Prof.

*Pharmacy*

Campbell, Alex. Prof.  
 Woods, Esli Instr.

*Philosophy*

Sharrard, J. A., M.A. Tor. Prof.  
 Bateman, J. V., B.A. T.C.D. Asst. Prof.

*Physics*

McGougan, A. G., B.A. McGill, Ph.D. Yale Prof.  
 Harrington, E. B., Ph.D. Chic. Prof.  
 Henderson, G. H., M.A. Dal., M.A. Camb. Asst. Prof.  
 Petry, R. L., M.A. Instr.

*Agriculture**Animal Husbandry*

Shaw, A. M., B.S.A. Tor. Prof.  
 Winters, L. M., M.Sc. Ames. Asst.  
 Benson, W. S., B.S.A. Sask. Instr.

*Dairying*

[Prof.]

Potts, A. E., B.Sc. Edin., M.S.A.  
 Broby, S. P. Instr.

*Engineering, Agric.*

Greig, A. R., B.Sc. McGill Prof.  
 Hardy, A. E., B.S.A. Ames. Prof.  
 Josephson, H. B. Instr.

*Farm Management*

Rutherford, W. J., B.S.A. Tor. Dean & Prof.

*Field Husbandry*

[Prof.]

Champlin, M., M.Sc. Sth. Dak.  
 Kirk, L. E., B.A., B.S.A. Sask. Asst. Prof.  
 Goulden, C. H., B.S.A. Instr.

*Horticulture*

Patterson, C. F., B.A. Tor., Ph.D. Ill. Asst. Prof.

*Poultry*

Baker, R. K., B.A. Man. Prof.

*Soils*

Hansen, R., M.S. Ill. Prof.  
 Joel, A. H., B.Sc. Mich. Asst. Prof.

*Veterinary Science*

Wright, N. Lectr.

*Engineering, v. also Agric.**Ceramic E.*

Worcester, W. G. Prof.

*Civil E.*

MacKenzie, C. J., B.E. Dal., M.C.E. Harv. Prof.  
 Williams, G. M., B.Sc. Neb. Prof.  
 Spencer, R. A., B.Sc. McG. Asst. Prof.

*Mechanical E.*

Greig, A. R., B.Sc. McG. Prof.  
 Fraser, I. M., B.Sc. McG. Asst. Prof.

*Extra-Mural Work*

Raynor, J. G., B.S.A. Man. Director.  
 Gordon, K. W., B.S.A. Man. Asst.  
 De Lury, Abigail Dir. of Home-makers Clubs.  
 Thompson, Esther, B.A. Man. Asst.



## AFFILIATED COLLEGES, ETC.

EMMANUEL COLLEGE, establd. 1879 for training native helpers at Prince Albert, transferred to its present site in the Univ. grounds in 1909. Principal, W. T. Hallam, M.A., B.D. Courses for Testamur, Lic.Th., B.Th.

St. CHAD's, Regina (Church of England).

PRESBYTERIAN COLLEGE, Saskatoon. Principal, E. H. Oliver, M.A., Ph.D.

COLLEGE OF PHYSICIANS AND SURGEONS; LAW SOCIETY; DENTAL COUNCIL; PHARMACEUTICAL ASSOCN.; ASSOCN. OF REGISTERED NURSES; VETERINARY ASSOCN.; ASSOCN. OF ARCHITECTS; INST. OF CHARTERED ACCOUNTANTS.

## GENERAL INFORMATION (v. also p. 280)

Established by Act of the Provincial Legislature in 1907, the Univ. opened classes in Arts and Science in 1909 and took over the educational work of the Agricultural Dept. in 1910. These were developed under the name of "Colleges." Colleges of Law and Engineering were opened in 1913 and 1915. The site includes 1340 acres devoted to Agric. Education and Research, and a campus of 300 acres with a half-mile river frontage. The land, buildings, and equipment cost over \$3,000,000.

Of the Board of Governors 5 members are elected by the Senate and 3 appointed by Govt.; the President is a member. The Senate (19 members elected by graduates, who also elect the Chancellor, and 13 *ex officio*, including the Minister of Education) regulates educational matters, the administration of which is controlled for the Univ. as a whole by an Academic Council and within each College by the Faculty. The President is a member of each of these bodies, and no appointment or dismissal is made without his recommendation. The maintenance of the Univ. is partially provided for by assignments of revenue and half of the Dominion grant in aid of Agric. education.

LIBRARY, 28,000 vols. LABORATORIES: Chem., Phys., Biol., Bact., Engin., Agric. Engin., Farm (830 a.), Agric. Exper. Fields (450 a.).

FACULTIES. Arts and Science (including Pharmacy and Accounting), Agric., Law, Engineering.

DEGREE COURSES. 4 yrs., B.A., B.Sc., B.Acc., B.S.P. (Pharmacy), B.S.A. (Agric.), B.E. (Engin.), LL.B. (3 or 4 yrs.); combined B.A. and B.S.A., 6 yrs. This Univ. has the sole right to confer degrees (other than Theol.) in the Province.

HIGHER DEGREES. Examn. open to Bachelors of 1 yr. standing—M.A., M.Sc., M.S.A.

DIPLOMAS AND CERTIFICATES. A 3-yr. course in Agric. leads to the "Associateship in Agric." A 2-yr. certif. course is given in Pharmacy.

FEES. Tuition for degree course in Agric., \$36 p.a.; Engin., \$45; Acc., \$40 to \$60; Pharm., \$50; Arts and Sc., \$3 to \$6 each class.

SCHOLARSHIPS FOR GRADUATES. One in Arts or Sc., \$100 p.a.; one in Engin., \$100; one in Law, \$50; one in Agric., \$800 p.a.

RESIDENCE. Hostels for 200 men and 30 women. Board and room fees, \$8 or \$9 a week.

UNIV. EXTENSION. In Farming and Home Economics short courses by itinerant lecturers at local centres. Annual convention (one week) in winter; 6 weeks' course in summer for teachers and others at the Univ. Bulletins, fairs and shows.

PUBLICATIONS. *Calendar* (April); *Agric. Bulletins*; *Sheaf*.

## THE YEAR 1921-22

NEW BUILDINGS. Chemistry, to cost \$600,000, begun; Presbyterian College, \$150,000.

EXTENSION WORK in Agric. through 150 Agric. Societies, 19,000 members; Boys' and Girls' Clubs, 3500 members; 200 Women's Clubs, 5000 members.

NUMBER OF STUDENTS. Arts and Sc., 426 (including 136 women); Accounting, 22; Law, 38 (1 woman); Engin., 44; Agric. (a) degree, 72, (b) Assoc'ship, 79; Pharm., 57; Household Sci., 8; summer school (a) degree, 112, (b) teachers, 129; evening (a) degree, 46, (b) others, 176; preparing for higher degrees, 10.

DEGREES, ETC., CONFERRED. B.A., 56; B.Sc., 13; LL.B., 11; B.S.A., 8; B.E., 2; B.S.P., 1; Assoc. in Agric., 16; Dipl.Pharm., 36; H. Sci., 7; M.A., 3; M.Sc., 4; M.S.A., 2.

# UNIVERSITY OF TORONTO

with which are federated

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EDUCATION—J. T. CRAWFORD, B.A.

MUSIC—ANNIE W. PATTERSON, B.A.

SCHOOL OF GRADUATE STUDIES—NORA MacKENZIE.

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WARDEN OF HART HOUSE—J. B. BICKERSTETH, M.A.

SUPT. OF BUILDINGS AND GROUNDS—A. D'O. LE PAN, B.A.Sc.

DIRECTOR OF UNIV. HEALTH SERVICE—G. D. PORTER, M.B.

MEDICAL ADVISER FOR WOMEN STUDENTS—EDITH GORDON, B.A.,  
M.B., D.P.H.

PROFESSORS, LECTURERS, ETC., November 24, 1922

[Members of the Staffs of Colleges—University, Victoria, Trinity,  
and St. Michael's—are indicated by (C.), (V.), (T.), and (M.).]

<i>Accountancy</i>	Piersol, W. H., B.A., M.B.
Ferguson, W. S.	Lectr. Assoc. Prof.
<i>Anatomy</i> , v. also Biol., Med.—	Watt, J. C., M.A., M.D.
Surg.	Asst. Prof.
McMurrich, J. P., M.A., Ph.D.	10 Assts., 2 Demrs.
J.H.U., LL.D. Mich. Prof.	<i>Archæology</i> , v. Classics

*Architecture*

Wright, C. H. C., B.A.Sc. (Prof.  
Drawing) Prof.

McConnell, A. W., B.A.Sc.  
Assoc. Prof.

Berrington, A. Assoc. Prof.

Madill, H. H., B.A.Sc. Lectr.  
6 Instrs.

*Astrophysics*

Chant, C. A., M.A., Ph.D. Harv. [Prof.  
3 Assts.

*Bacteriology, v. Med.—Path.**Bio-Chemistry*

Hunter, A., M.A., B.Sc., M.B.,  
Ch.B. Edin. Prof.

Wasteneys, H., Ph.D. Col.  
Assoc. Prof.

Benson, Clara C., Ph.D.  
Assoc. Prof. of Physiol.  
Chem. in Faculty of  
Household Sc.

4 Fellows, 1 Demr., 1 Instr.,  
1 Asst. (Food Chem.).

*Biology, v. also Histol., Zool.*

Walker, E. M., B.A., M.B.  
Assoc. Prof.

Huntsman, A. G., B.A., M.B.  
(Marine B.) Assoc. Prof.

Clemens, W. A., M.A., Ph.D.  
Corn.

Asst. Prof. of Lymnobiology.  
Baillie, W. H. T., M.A., M.B.

Lectr. in Mamm. Anat.  
Craigie, E. H., B.A., Ph.D.

Lectr. Comp. Anat. and Neur.  
MacArthur, J. W., A.B. Ober.,  
M.A. Wabash Lectr.

1 Demr., 13 Class Assts.

*Botany*

Faull, J. H., B.A., Ph.D. Harv. [Prof.

Thomson, R. B., B.A. (Phan.B.)  
Assoc. Prof.

Duff, G. H., Ph.D. Lectr.

Wright, Jessie G., M.A. Lectr.  
2 Instrs., 2 Assts.

*Chemistry, v. also Elec., Eng.*

Lang, W. R., D.Sc. Glas. Prof.

Miller, W. L., B.A., Ph.D. Munich  
(Physical C.) Prof.

Allan, F. B., Ph.D. (Org. C.) Prof.

Kenrick, F. B., M.A., Ph.D. Leip.  
Prof.

Rogers, L. J., B.A.Sc. Asst. Prof.

Funnell, W. S., M.A. Asst. Prof.

Martin, W. H., Ph.D. Asst. Prof.

Boswell, M. C., M.A. Harv., Ph.D.  
(Org. Chem.) Assoc. Prof.

9 Assts.

*Classics, v. also Hist.*

Hutton, M., M.A. Ox., LL.D.  
(Greek) Prof. (C.).

Carruthers, A., M.A. (Gk. Lit. and  
Archæology) Prof. (C.).

Woodhead, W. D., B.A. Ox., M.A.  
Alta., Ph.D. Chic. (Greek)

Assoc. Prof. (C.).  
Robertson, J. C., M.A. (Gk. Lang.  
and Philos.)

W. E. H. Massey Prof. (V.).  
Langford, A. L., M.A. (Gk.)

Prof. (V.).  
Owen, E. T., M.A. (Gk.) Prof. (T.).

Adams, S. M., M.A. Lectr. (T.).

Robertson, H. G., B.A., Ph.D.  
Chic. Lectr. (V.).

Carr, H., B.A., LL.D. (Gk. and  
Hist. of Philos.) Prof. (M.).

Macnaughton, J., M.A., LL.D. Qu.  
(Latin) Prof. (C.).

Smith, G. Oswald, M.A. Ox.  
(Latin) Assoc. Prof. (C.).

Dale, E. A., M.A. Ox. (Latin)  
Assoc. Prof. (C.).

Duff, D., M.A., B.D. Edin.  
Asst. Prof. (C.).

1 Instr. (C.).  
De Witt, N. W., B.A., Ph.D. Chic.

(Latin Lit.) Prof. (V.).  
1 Fellow, (V.).

Kirkwood, W. A., M.A., Ph.D.  
Harv. (Latin) Prof. (T.).

Woodcock, J. N., M.A. Ox.  
(Latin) Prof. (T.).

McBrady, R. (Latin) Prof. (M.).

Walsh, J. B. (Latin)  
Assoc. Prof. (M.).

St. Clare, M. M., B.A. (Latin)  
Lectr. (M.).

*Drawing*, v. also Archit.

Cockburn, J. R., B.A.Sc.  
Assoc. Prof. of Descr. Geometry.  
Smither, W. J., B.A.Sc. Asst. Prof.  
Wright, W. J. T., B.A.Sc. Lectr.  
9 Demrs., 2 Instrs.

*Economics*, v. Pol. Econ.

*Education*, v. also Household  
Sc., Music

Pakenham, W., B.A., LL.D. Prof.  
Sandiford, P., M.Sc. Manc., Ph.D.  
Col. (Educ. Psych.) Prof.  
Cornish, G. A., B.A. Assoc. Prof.  
Crawford, J. T., B.A. Assoc. Prof.  
Ferguson, W. C., B.A. Asst. Prof.  
Coombs, F. E., M.A. Asst. Prof.  
Jones, Geo. M., B.A. Asst. Prof.  
Macpherson, W. E., B.A., LL.B.  
Qu. Asst. Prof.  
Perry, S. W., B.A. Lectr.  
Scarrow, A. N. Lectr.  
16 Instrs.

*Electro-Chemistry* [Asst. Prof.  
Burt-Gerrans, J. T., M.A., Phm.B.  
3 Assts.

*Embryology*, v. Histol., Zool.

*Engineering, Chemical, and  
Applied Chemistry*

Bain, J. W., B.A.Sc. Prof.  
Boswell, M. C., B.A.Sc., M.A.  
Harv., Ph.D. (Org. Chem.)  
Assoc. Prof.  
Ardagh, E. G. R., B.A.Sc.  
Assoc. Prof.  
Locke, C. D., B.S., M.A. Lectr.  
3 Demrs., 1 Instr.

*Engineering, Civil, and Applied  
Mechanics*

McGowan, J., B.A., B.A.Sc. Prof.  
Gillespie, P., M.Sc., C.E. Prof.  
Young, C. R., B.A.Sc., C.E.  
Assoc. Prof.  
Laing, A. T., B.A.Sc. (Highways)  
Assoc. Prof.  
Loudon, T. R., B.A.Sc. „ „

Bennett, S. G., M.C., B.A.Sc.  
(Comm. Eng.) Lectr.  
3 Demrs.

*Engineering, Electrical*

Rosebrugh, T. R., M.A. Prof.  
Price, H. W., B.A.Sc. Prof.  
Zimmer, A. R., B.A.Sc. Asst. Prof.  
Guest, W. S., B.A.Sc. Lectr.  
1 Asst., 11 Demrs.

*Engineering, Mechanical*

Angus, R. W., B.A.Sc. Prof.  
Allcut, E. A., M.Sc. Birm. (Thermodyn.) Assoc. Prof.  
Parkin, J. H., B.A.Sc., M.E.  
(Design) Asst. Prof.  
Taylor, R., B.A.Sc. (Hydraul.)  
Asst. Prof.  
Tuttle, H. A., B.A.Sc. (Thermodyn.)  
Lectr.  
1 Asst., 5 Demrs.

*Engineering, Metallurgical*

Guess, G. A., M.A. Qu. Prof.  
Ellis, O. W., M.Sc. Birm. Asst. Prof.  
Toomer, J. E., B.S. Lectr.

*Engineering, Mining*

Haultain, H. E. T., C.E. Prof.  
King, J. T. D., B.A.Sc. Asst. Prof.  
Dyer, F. C., B.A.Sc. Asst. Prof.  
2 Demrs.

*English*, v. also Philos.

Alexander, W. J., B.A. Lond.,  
Ph.D. J.H.U., LL.D. Qu.  
Prof. (C.).  
Wallace, M. W., B.A., Ph.D. Chic.  
Prof. (C.).  
Knox, R. S., M.A. Aberd., B.A.  
Ox. Assoc. Prof. (C.).  
Davis, H. J., M.A. Ox.

Assoc. Prof.  
Clawson, W. H., B.A. N.Br., M.A.,  
Ph.D. Harv. Asst. Prof. (C.).  
Waddington, Miss M. M., Ph.D.  
Lectr. (C.).  
Wookey, Gladys E., B.A.  
Lectr. (C.).  
Edgar, O. P., B.A., Ph.D. J.H.U.  
Gooderham Prof. (V.).

- Auger, C. E., B.A.  
 Assoc. Prof. (V.).
- Pratt, E. J., Ph.D. Lectr. (V.).
- Simpson, H. C., B.A. Ox., M.A.  
 Tor. & Harv. (E. Lit.)  
 Prof. (T.).
- Hodgins, L. C. A., M.A. Harv.  
 Assoc. Prof. (T.).
- Cartwright, Mabel, B.A.  
 Lectr. (T.).
- Margarita, M. M., B.A. (Anglo-Saxon)  
 Lectr. (M.).
- Agnew, Ruth M. Lectr. (M.).
- Athanasia, M.M., M.A. Lectr. (M.).
- Lectrs. for Med. Students:  
 Daniher, E. L., B.A.  
 Van Every, J. F., B.A.
- Ethnology*, v. Philos.
- Forestry*
- Howe, C. D., M.A. Ver., Ph.D.  
 Chic. Prof.
- Millar, W. N., B.Sc. Penn., M.F.  
 Yale Assoc. Prof.
- White, J. H., M.A., B.Sc.F., Ph.D.  
 Assoc. Prof.
- French*
- Cameron, J. H., M.A. Prof. (C.).
- Will, J. S., B.A., Ph.D. Col.  
 Prof. (C.).
- De Champ, St. E., B. ès L. Lyons,  
 O.I.P. Assoc. Prof. (C.).
- Jeanneret, F. C. A., B.A.  
 Assoc. Prof. (C.).
- Morand, M., L. ès L., Agrégé de  
 l'U. Assoc. Prof. (C.).
- McKellar, H. S., B.A.  
 Asst. Prof. (C.).
- Allen, L., Ph.D. Chic. Asst. Prof.
- Andison, J. G., B.A. Man., A.M.  
 Col. Lectr. (C.).
- Ford, H. E., M.A., Ph.D. Col.  
 Prof. (V.).
- De Beaumont, V., M.A. Col.  
 Assoc. Prof. (V.).
- Lacey, A., M.A. Lectr. (V.).
- Rowell, Mary C., B.A. Lectr. (V.).
- Kittredge, R. E. L., M.A. Harv.  
 Prof. (T.).
- Norton, A. A., M.A. Camb.  
 Lectr. (T.).
- Murray, W. H., B.A.  
 Assoc. Prof. (M.).
- O'Driscoll, Eliz., M.A. N.U.I.  
 Assoc. Prof. (M.).
- Agnes, S. M., B.A. Lectr. (M.).
- Pageau, J. E. Lectr. (M.).
- Estelle, M. M., M.A. Lectr. (M.).
- 4 Instrs. (C.), 1 Instr. (V.), 3  
 Instrs. (T.).
- Geology*
- Parks, W. A., Ph.D. Prof.
- Moore, E. S., M.A., Ph.D. Chic.  
 (Economic G.) Prof.
- MacLean, A., B.A. Asst. Prof.
- 1 Class Asst.
- German*, v. also Philol., Psych.
- Needler, G. H., B.A., Ph.D. Leip.  
 Prof. (C.).
- Fairley, B., M.A. Leeds, Ph.D.  
 Jena Assoc. Prof. (C.).
- Hedman, T., Ph.B. Chic.  
 Asst. Prof. (C.).
- Holt, G. E., M.A., Mus.B.  
 Lectr. (C.).
- Lang, A. E., M.A. Prof. (V.).
- Addison, Margt., B.A. Lectr. (V.).
- Robins, J. D., B.A. Lectr. (V.).
- Young, A. H., M.A., D.C.L.  
 Prof. (T.).
- Scott, Miss L. C., M.A. Lectr. (T.).
- Perpetua, S. M., B.A. Lectr. (M.).
- Hebrew*, v. also Orient
- Cosgrave, F. H., M.A. Dub., B.D.  
 [Prof. (T.).]
- Rollo, W., M.A. Aberd. Lectr. (T.).
- Histology and Embryology.*
- Piersol, W. H., B.A., M.B.  
 [Assoc. Prof.]
- History*, v. also Orient. Langs.
- Wrong, G. McK., M.A., LL.D.  
 McG. Prof.
- Williams, R. H., M.A. Ox., A.M.  
 Col. Assoc. Prof.
- Smith, G. M., M.A. Ox.  
 Assoc. Prof.

Flenley, R., M.A. Liv., B.Litt. Ox.  
 Assoc. Prof.  
 Brebner, J. B., B.A. Ox. Lectr.  
 Wrong, H. H., B.A. Ox. Lectr.  
 Kennedy, W. P. McC., M.A. Ox.,  
 Litt.D. Dub. (Spl. Lectr. in Pol.  
 Econ.) Spl. Lectr.  
 Wallace, W. S., M.A. Ox.  
 Spl. Lectr.

1 Instr.

### *History, Ancient*

Milner, W. S., M.A. (Greek and  
 Roman H.) Prof. (C).  
 Cochrane, C. N., M.A. Ox.  
 Assoc. Prof. (C.).  
 Brown, A. Grant, M.A. Ox.  
 Asst. Prof. (C.).  
 Sissons, C. B., B.A.  
 Nelles Prof. (V.).  
 Duckworth, H. T. F., M.A. Ox.  
 Prof. (T.).

### *History of Industrial Art*

Currelly, C. T., M.A. Prof.  
 Harcum, Cornelia, M.A., Ph.D.  
 J.H.U. Asst. Prof.

### *Household Science, v. also Bio- Chem.*

[Assoc. Prof.  
 Laird, Annie L., M.S. Drex.  
 Coatsworth, Helen R., B.A. Lectr.  
 McMillan, Eva M., Ph.B. Chic.  
 Lectr.  
 Harris, Blanche R., B.Sc., M.A.  
 Col. Lectr.  
 Ockley, Laura L., B.A.  
 Asst. Prof. in Coll. of Educ.  
 3 Instrs.

### *Italian and Spanish*

Buchanan, M. A., B.A., Ph.D.  
 Chic. Prof.  
 Shaw, J. E., A.B., Ph.D. J.H.U.  
 Prof.  
 Goggio, E., A.B., Ph.D. Harv.,  
 M.A. Asst. Prof.  
 Patterson, G. C., B.A. Lectr.  
 Swedelius, B. F., Ph.D. Col.  
 Spl. Lectr.  
 Conlogue, R. B., M.A. Spl. Lectr.

### *Law*

Black, T. H., M.A., B.Sc., LL.B.  
 Glas. (Roman L.) Prof.  
 Clute, A. R., B.A., LL.B. (Federal  
 Constit. & Comm. L.) Lectr.  
 Foster, H. W. A., LL.B. (Comm.  
 and Int. L.) Lectr.

### *Mathematics*

De Lury, A. T., M.A. Prof.  
 Fields, J. C., B.A., Ph.D. J.H.U.,  
 F.R.S. Prof.  
 Mackenzie, M. A., M.A. Camb.  
 Prof.  
 Beatty, S., Ph.D. Assoc. Prof.  
 Pounder, I. R., M.A. Asst. Prof.  
 Synge, J. L., B.A. Dub.  
 Asst. Prof.  
 Stevenson, A. F. C., B.A. Camb.  
 Lectr.  
 Robinson, D. A. F., B.A. Lectr.  
 3 Fellows and 1 Tutor.

### *Mechanics*

Loudon, W. J., B.A. Prof.  
 Sheppard, N. E., M.A. Lectr.

### *Medicine and Surgery, v. infra*

### *Military Studies*

Prof. Lang (v. Chem.) Director.  
 Cartwright, G. S., C.B., C.M.G.  
 Spl. Lectr.

### *Mineralogy*

Walker, T. L., M.A. Qu., Ph.D.  
 Leip. Prof.  
 Parsons, A. L., B.A. N.Y.  
 Assoc. Prof.  
 Thomson, J. E., B.A.Sc.  
 Asst. Prof.

1 Demr.

### *Mining, v. Engin.*

### *Music*

Fricker, H. A., M.A., Mus.B.  
 (Choral and Orch. M.) Lectr.  
 Ham, A., Mus.D. (Church M.)  
 Lectr.  
 Mouré, F. A., Mus.D. (Hist. of M.)  
 Lectr.  
 Willan, H., Mus.Doc. (Theory  
 of M.) Lectr.

- Bramfitt, G. N., B.A.  
Lectr. (Coll. of Educ.).
- Oriental Lang.*, v. also Hebrew  
Taylor, W. R., Ph.D. Prof. (C.).
- Irwin, W. A., M.A., D.B. Chic.  
Lectr. (C.).
- McLaughlin, J. F., B.A., D.D.  
(Langs. and Lit.)  
Massey Prof. (V.).
- Hooke, S. H., M.A. Ox., B.D.  
Lond. (Spl. Lectr. in Hist.)  
Flavelle Prof. (V.).
- Potter, W. A., M.A., B.D.  
Assoc. Prof.
- Philology*  
Horning, L. E., B.A., Ph.D. Gött.  
(Teutonic P.) Prof. (V.).
- Philosophy*, v. also Classics  
Hume, J. G., B.A., A.M. Harv.,  
Ph.D. Frei. (Baden) (Hist.  
of P.) Prof.
- Brett, G. S., M.A. Ox. Prof.
- Robinson, T. R., Ph.D. Asst. Prof.  
1 Class Asst.
- Tracy, F., B.A., Ph.D. Clark  
(Ethics) Prof. (C.).
- Lane, W. B., M.A., Ph.D. Wisc.  
(Ethics) Ryerson Prof. (V.).
- Brown, W. T., M.A., Ph.D. Harv.  
(Ethics) Assoc. Prof. (V.).
- Kingston, G. F., M.A., B.D.  
King's (Ethics)  
Assoc. Prof. (T.).
- Windle, Sir B., M.A., M.D., Sc.D.,  
LL.D., F.R.S. (Spl. Lectr.  
in Ethnology in the Univ.)  
Prof. (M.).
- Roach, W. J., B.A. (Ethics)  
Prof. (M.).
- McCorkell, E. J., B.A., M.A.  
Cath.U.Am. (Assoc. Prof. of  
English).  
Prof. of Social Ethics (M.).
- Bellisle, H. S., B.A., M.A.  
Cath.U.Am. (Logic)  
Prof. (M.).
- Hurley, A. E., S.T.L. (Theodicy)  
Prof. (M.).
- Sullivan, B., M.A. (Soc. Eth.)  
Lectr. (M.).
- Physics*, v. also Astro-  
Mechanics  
McLennan, J. C., O.B.E., Ph.D.,  
D.Sc., LL.D., F.R.S. Prof.
- Burton, E. F., B.A. Camb., Ph.D.  
Assoc. Prof.
- Satterly, J., M.A. Camb., D.Sc.  
Lond. Assoc. Prof.
- Gilchrist, L., M.A., Ph.D. Chic.  
Asst. Prof.
- McTaggart, H. A., B.A. Camb.,  
M.A. Asst. Prof.
- 11 Demrs., etc.
- Physics and Photography*  
Anderson, G. R., M.A. Assoc. Prof.  
3 Instrs.
- Physiology*, v. also Bio-Chem.  
MacLeod, J. J. R., M.B., Ch.B.  
Aberd., D.P.H. Camb. Prof.
- Olmsted, J. M. D., M.A. Ox.,  
Ph.D. Harv. Asst. Prof.
- Taylor, N. B., M.B. Asst. Prof.
- 7 Fellows and 1 Demr.
- Political Economy*, v. also Hist.  
Mavor, J., Ph.D. Prof.
- MacIver, R. M., M.A., D.Phil.  
Edin., B.A. Ox. Prof.
- Fay, C. R., M.A. Camb., D.Sc.  
Lond. (Econ. Hist.) Prof.
- Jackman, W., M.A. (Rural Econ.)  
Assoc. Prof.
- Jackson, G. E., B.A. Camb.  
Assoc. Prof.
- Innes, H. A., M.A. McM., Ph.D.  
Chic. Lectr.
- Kemp, H. R., M.A. Lectr.
- Bladen, V. W., B.A. Ox. Lectr.
- Dobbs, S. P., B.A. Camb. Lectr.  
1 Instr.
- Psychology*  
Bridges, J. W., B.A. McG., A.M.,  
Ph.D. Harv. Assoc. Prof.
- Bott, E. A., Ph.D. Asst. Prof.
- Banham, Katharine M., B.Sc.  
Manc. Lectr.
- 2 Assts.
- Oliver, M. J., Ph.M. Cath.U.Am.,  
B.A. (Assoc. Prof. of German)  
Prof. (M.).



McDonagh, V. A., M.B. Lectr. (M.).

*Public Health Nursing* [Director.  
Russell, Edith K., B.A. King's  
Cowan, Kate S., Supervisor of  
Field Work.

*Religious Knowledge*, v. the  
Federated Univs. and Colls.

*Social Service*, v. also English  
Dale, J. A., M.A. Ox.  
Prof. Soc. Science.

McGregor, Agnes  
Director of Field Work.  
12 Instrs.

*Spanish*, v. Italian

*Surveying*  
Stewart, L. B. (S. and Geodesy)  
Prof.

Treadgold, W. M., B.A.  
Assoc. Prof.

Crerar, S. R., B.A.Sc. Asst. Prof.  
Banting, E. W., B.A.Sc.

Asst. Prof.  
Melson, J. W., B.A.Sc. Lectr.

*Zoology*  
Bensley, B. A., Ph.D. Col. Prof.  
Coventry, A. F., B.A. Ox. (Verte-  
brate Embryology) Asst. Prof.  
Dymond, J. R., M.A. (Vert. Z.)  
Lectr.

*Zymology* [Assoc. Prof.  
Speakman, H. B., M.Sc. Manch.

Medicine (for subjects of the first  
2 yrs.—Anat., etc., v. *supra*)

*Bacteriology*, v. Path.

*Gynæcology*, v. Obst.

*Hygiene*  
Fitzgerald, J. G., M.B. Prof.  
Defries, R. D., M.B., D.P.H.

Assoc. Prof.  
Fraser, D. T., B.A., M.B., D.P.H.

Asst. Prof.  
Porter, G. D. Lectr.  
5 Demrs.

*Medical Jurisprudence*  
Silverthorne, G., M.B. Prof.

*Medicine and Clinical Medicine*,  
v. also Path.

Graham, Duncan A. L., M.B. Prof.  
Fotheringham, J. T., C.M.G.,  
B.A., M.D., C.M., LL.D.

Assoc. Prof.  
Smith, D. K., M.B. Asst. Prof.  
Howland, G. W., B.A., M.B.

Asst. Prof.  
Oille, J. A., M.D. Asst. Prof.

Assoc. Profs. of Clin. Med. :

Chambers, G., B.A., M.B.

Goldie, W., M.B.

Thistle, W. B., M.D.

Anderson, H. B., M.D., C.M.

6 Associates, 27 Demrs.

*Obstetrics and Gynæcology*  
Hendry, W. B., B.A., M.B. Prof.  
McIlwraith, K. C., M.B.

Assoc. Prof.

Marlow, F. W., M.D., C.M.

F.R.C.S. Eng. Assoc. Prof.

Cleland, F. A., B.A., M.B.

Asst. Prof.

4 Associates, 5 Demrs.

*Ophthalmology* [Prof.  
MacCallum, J. M., B.A., M.D.  
Lowry, W. H., M.D., C.M.

Asst. Prof.

MacIennan, D. N., M.D., C.M.

Asst. Prof.

4 Demrs.

*Oto-Laryngology*  
Goldsmith, P. G., C.B.E., M.D.,  
C.M. Prof.

Royce, G., B.A., M.B. Assoc. Prof.

2 Associates, 4 Demrs.

*Pathology and Bacteriology*  
Anderson, H. B., M.D., C.M.  
(Assoc. Prof. Clin. Med.)

Prof. Clin. Path.

Maitland, H. B., M.B. Asst. Prof.

Magner, W., M.D., D.P.H. Lectr.

Robinson, W. L., B.A. McM.,

M.B. Lectr.

4 Fellows, 4 Assts.

- Pathological Chemistry*  
 Harding, V. J., D.Sc. Manc. Prof.  
 Hunter, G., M.A., B.Sc. (Agric.)  
     Glas.                      Lectr.  
 2 Fellows and 4 Demrs.
- Pediatrics*  
 Brown, A. G., M.B. Assoc. Prof.  
 1 Associate, 7 Demrs.
- Pharmacy and Pharmacology*  
 Henderson, V. E., M.A., M.B.  
    Prof.  
 Sharpe, N. C., B.A., M.B.  
    Asst. Prof.  
 3 Assts., 1 Instr.
- Psychiatry*  
 Clarke, C. K., M.D., LL.D. Prof.  
 1 Associate, 3 Demrs.
- Radiology*  
 Richards, G. E., M.B.      Assoc.
- Surgery and Clinical Surgery*  
 Starr, C. L., M.B., M.D. Bellevue,  
     N.Y.                      Prof.  
 Primrose, A., C.B., M.B., C.M.  
     Edin. (Clinical S.)      Prof.  
 Bruce, H. A., M.D., F.R.C.S. Eng.  
     (Clinical S.)              Prof.  
     Assoc. Profs. of Clin. Surg. :  
     Hay, S. M., M.D.  
 McKeown, P. W. H., C.B.E., B.A.,  
     M.B.  
 Starr, F. N. G., C.B.E., M.B.  
     Asst. Profs. of Clin. Surg. :  
     Gallie, W. E., M.D., F.R.C.S.  
     Jones, W. W., B.A., M.B.,  
     F.R.C.S.  
 7 Associates, 25 Demrs.
- Therapeutics*  
 Rudolf, R. D., C.B.E., M.D., C.M.  
     Edin.                      Prof.  
 1 Fellow, 9 Demrs.

## COLLEGES OF THE UNIVERSITY

UNIVERSITY COLLEGE. Principal—M. Hutton, M.A., LL.D.; Registrar—G. O. Smith, M.A.

VICTORIA COLLEGE. The Faculty of Arts of Victoria Univ., v. *infra*.

TRINITY COLLEGE. The Faculty of Arts of the Univ. of Trinity College, v. *infra*.

ST. MICHAEL'S COLLEGE. Superior—Prof. H. Carr, B.A., LL.D.; Registrar—Rev. E. J. McCorkell, M.A. Other Teachers: the Profs., etc., marked (M.) in above list.

## FEDERATED COLLEGES

ST. MICHAEL'S, v. *supra*.

KNOX COLLEGE and WYCLIFFE COLLEGE. Teachers giving instruction in Univ. courses (*Religious Knowledge*): (1) Knox—R. Davidson, Ph.D.; A. Gandier, M.A., D.D.; W. Manson, M.A.; D. M. Ramsay, D.D. (2) Wycliffe—W. R. R. Armitage, M.A.; E. A. McIntyre, M.A., B.D.; T. R. O'Meara, B.A., LL.D.; C. V. Pilcher, M.A., D.D.

## AFFILIATED COLLEGES

ONTARIO AGRICULTURAL COLLEGE, GUELPH. President—J. B. Reynolds, M.A. 16 Profs., 6 Assoc. Profs., and 14 Lectrs. 25 Demrs. and Instrs.

ROYAL COLLEGE OF DENTAL SURGEONS, TORONTO. President—M. A. Morrison, D.D.S.; Secy.-Treas.—W. E. Willmott, D.D.S.; Registrar—E. E. Bruce, D.D.S. Faculty—22 Profs.; 8 Assoc. Profs.; 6 Lectrs.; 9 Clinicians; 32 Demrs.

ONTARIO COLLEGE OF PHARMACY, TORONTO. President of Council—Alex. Stewart; Registrar-Treasurer—W. R. Graham. Faculty—4 Teachers.

ONTARIO VETERINARY COLLEGE, TORONTO. Principal—C. D. McGilvray, D.V.S.

ALBERT COLLEGE, Belleville; ALMA COLLEGE, St. Thomas; ONTARIO LADIES' COLLEGE, Whitby; ST. HILDA'S COLLEGE, TORONTO (the Women's RESIDENCE for Trin. Coll.).

## GENERAL INFORMATION (v. also p. 280)

An appropriation of 500,000 acres of land for the support of 4 grammar schools and a Univ. in Upper Canada was made in 1798, and a Royal Charter was granted in 1827 for a "King's College" with the privileges of a Univ., but it was not until 1843 that the College was inaugurated. In 1849 its title was changed to The University of Toronto. It was reorganized in 1853 as an examining and degree-conferring body on the model of the Univ. of London. In 1887 it again became a teaching body, the Faculties of Medicine and Law which had been abolished prior to the reorganization of 1853 were revived, the Arts work was divided between the Univ. and Univ. College, and provision was made for the admission of other institutions as Federated Colleges. Victoria, Trinity, and St. Michael's Colleges became integral parts of the Univ. in 1892, 1904, and 1907 respectively.

LIBRARY, 177,858 vols. and 57,027 pamphlets. Annual Grant for purchase of books is \$18,000, with special grant, \$15,000. 60 periodicals subscribed for and many others received. The (Science) Library of the Roy. Can. Inst. is housed in the same building. MUSEUMS: Anat., Geol., Mineral.; Trinity has a Nat. Hist. and Archæol. Museum of its own; the Agric. and Vet. Colleges, Knox, and the School of Dentistry have each one. The Ontario Provincial Museums of Archæol. and Nat. Hist. are in the vicinity. LABORATORIES: very extensive in all depts. of Applied Science and Engineering as well as Anat., Biol. Chem., Geol., Household Sc., Path., Physics, Physiol.; described in *Bulletin* for Graduate Students. BOTANICAL GARDEN. OBSERVATORY. HOSPITALS available for Clinics: General, 700 beds; Children's, 250; St. Michael's, 400; Western, 120.

FACULTIES. Arts, Medicine, Applied Science and Engineering (Depts.—Archit., Civil E., Mining E., Mech. E., Chem. E., Elec. E., Metall. E.), Education, Forestry, Household Sc., Music, School of Graduate Studies. DEPARTMENTS. Social Service, Public Health Nursing.

UNIVERSITY MATRICULATION BOARD. As a result of a conference of representatives of the Univs. of Toronto, Queen's, McMaster, and Western Univ., London, held in Dec. 1908, the Senates of these Univs. created a Board to conduct and control their annual Matricn. examns. The Dept. of Educn. of Ontario agreed to provide the same machinery for holding these examns. as it employs for the Departmental examns., and the Registrar of the Dept. is Secy. of the Board. In connexion with the Pass Junior Matricn. examn. a report signed by all members of the staff of the school concerned as to the standing of their candidates is taken into account in determining the results.

The subjects of Pass Matricn. are (1) Latin, (2) English, (3) History, (4) Maths., (5) Greek, (6) French, (7) German, (8) Spanish or Italian, (9) Physics and Chemistry. For Matricn. in Arts it is necessary to pass in (1) to (4) and any two of (5) to (9). In certain cases foreign students may substitute their native language for Greek or French or German.

For Matricn. in the Univ. of Toronto in Med. the requirements are (1) to (4), (9), and any one of (5) to (8) with honour standing in (2), (4), and one of (5) to (8); in Applied Sc. or Forestry—(2), (3), (4), and any three of (1) and

(5) to (9) with honour standing in (2), (4), and one of (1), (5) to (8); in Music—(2) and any two of (1), (5), (6), (7), (8).

Minimum age for admission to the Faculty of Arts, 16; Law, 21; Med., 17; Appl. Sc., 17; Educ., 19; Forestry, 17.

DEGREE COURSES. 4 yrs.—B.A., B.Com., B.A.Sc., B.Sc. (Med.), B.Sc.F., B.S.A. and B.V.Sc. (at Guelph), Phm.B.; 3 yrs.—Mus.B.; 5 yrs.—D.D.S.; 6 yrs.—M.B. Combined courses: B.A. and B.Sc.F.—6 yrs.; B.A. and M.B.—7 yrs.; M.B. and D.D.S.—7 yrs.

Certificates of having passed certain examns. of the standard of the Oxford and Cambridge Local School Certif. may enable a student to enter at the second year the B.A. Pass course (but not an Honours course except in Polit. Sc. or Philos.), provided he is not less than 17 yrs. of age.

Honour courses for the B.A. are provided in Household Science and in Science for teachers, the B.Pæd. being a post-graduate degree.

The first 2 yrs. of the Law course may be taken in Arts in the Univ., the 3 remaining yrs. being taken at Osgoode Hall.

The B.Sc. (Med.) may be obtained by Med. students who, after the 4th or subsequent year of Med. study, having maintained therein a prescribed standard of proficiency, spend a year in courses in the introductory Med. sciences, and show facility in reading one modern language besides English.

A student who has already graduated in the Faculty of Arts, Med., or Science of a Canadian or other recognized Univ. may complete the course in Dentistry in 4 yrs. instead of 5; and persons holding the L.D.S. of one of the Med. authorities of Great Britain or the B.D.S. degree of Melbourne may be admitted in the Dept. of Dentistry without further examn., and to the final D.D.S. examns. on completing one full session at the School of Dentistry of the Royal Coll. of Ontario.

*Higher Degrees.* M.A., obtainable by approved course of graduate study extending over 2 yrs. or, in the case of a B.A. in an Honours course, 1 yr.; Ph.D., open to a graduate in Arts (or, on special conditions, another Faculty) of this or another recognized Univ. by pursuing in the Univ. of Toronto an advanced course of study for 3 yrs., exemption from 1 of which may be given in consideration of the candidate having already pursued such a course for 1 yr. A thesis embodying the result of an original investigation is required.

M.D. and Ch.M. obtainable after 3 yr. course open only to graduates in Med. of a recognized Univ. The D.P.H. course (for Med. graduates) covers 11 months—1 winter and 1 summer session.

The M.A.Sc. may be obtained by a B.A.Sc. of this Univ. who pursues a course of advanced study in the Faculty for 1 yr., presents a satisfactory thesis, and passes such examns. as may be prescribed.

The professional degrees, C.E., M.E. (Mining or Mech.), E.E., Chem.E. are open to candidates who, after obtaining the B.A.Sc. or diploma of the Faculty, spend 3 yrs. in the actual practice of one of these branches of engineering, present a satisfactory thesis, and pass examns. The F.E. may similarly be obtained by a B.Sc.F.

The B.Pæd. and D.Pæd. are open to graduates in Arts or Science of any British Univ. who hold a 1st class or High School Asst.'s certif. of Ontario or its equivalent, and pass, after 2 yrs.' (D.Pæd.—3 yrs.) successful experience in teaching, prescribed examns. For the D.Pæd. a thesis is also required, and the candidate must have attended a summer course (or its equivalent) in each subject of examn.

The Mus.D. is open to a Mus.B. of this or another Univ. of 3 yrs.' standing.

The Univ. publishes annually an announcement of *Graduate Courses*. All communications on the subject must be addressed to the School of Graduate Studies.

RECOGNITION BY OTHER UNIVS. (v. pp. 48, 229, 237, 266).

TRAINING OF TEACHERS. Courses are provided for Teachers' certificates of several grades, including the Household Science and the Physical Culture Teachers'. The Educn. Dept. of Ontario grants certifs. on the results of Univ. examns., entitling the holders to teach in the Public Schools. All teachers for the upper grades of Public and High Schools and Colls. must spend at least 1 yr. in the College of Education.

FEES. Students proceeding to the B.A. and enrolled in one of the Colleges of the Univ. attend lectures of Univ. Profs. and Lectrs. in the Faculty of Arts without payment of fees except for laboratory supplies. The College Fees, which entitle students to attend lectures in their respective Colleges, are about \$40 p.a. Medical students pay for tuition, laboratory supply, hospital and annual examn., \$150 p.a. Certificate courses in the College of Education cost \$25 p.a. Forestry, \$80 p.a. Applied Science and Engineering, \$150. D.P.H., \$150.

SCHOLARSHIPS, etc., open to graduates include \$120 for 2 yrs. for Divinity course in Trinity Coll.; Fellowship in Philos., \$300; \$1000 Prize for Scientific research or invention, open to all Canadians; \$500 Scholarship in Medicine; \$500 Fellowship in Anatomy; \$750 Fellowships (one or more, each tenable for 3 yrs.) for research in Medicine; and others. V. p. 561.

RESIDENCE. University Houses accommodate 150 men, rent, \$4 per week; Univ. Coll. Hall, Residence and board for women (133), about \$8 per week; Victoria Coll. Halls for 132 men, about \$9 per week, and 126 women, \$200 to \$300 p.a.; Trinity Coll. provides for 70 men and 50 women; St. Michael's (R.C.) has also Residences for men and women.

PUBLICATIONS. *President's Annual Report*; *Calendars* of the several Faculties, April and May; *Graduate Studies Bulletin*; *Medical Bulletin*; *Univ. Monthly*; *Can. Historical Review*; *Univ. Studies*; Students' Mags.—*'Varsity, Torontonensis, The Goblin*.

## THE YEAR 1921-22

BENEFACTIONS. Rockefeller Foundation, \$52,557; Eaton Endowment, \$25,000; John Hoskin Bequest, \$14,000; Carnegie Corporation for research in Physics, \$13,200; Canadian Red Cross for Public Health Nursing Dept., \$5075; Marion E. Dickenson Scholarship Foundation Household Sc., \$4000; Graduate Fellowships—C.P.R., \$1500, Sir Edmund Osler, \$500, Sir Edward Kemp, \$500, and Colonel R. W. Leonard, \$500; Canadian Oral Prophylactic Asscn. for Dental Research, \$3000; Sir Edmund Osler for Pathol. Investigs. Fund, \$1000; R. A. Reeve Bequest, \$700; R. Stothers, balance of Wm. Hardie Scholp. Foundation, \$700; Boiler Inspection Scholp., \$130; Jardine Memorial Prize for poem, \$100; Dr. R. A. Reeve Prize in Med., \$50; Menorah Prize, \$50; Sir John Gibson for medal, \$25; Tracy Prize in Ethics, \$20; McCaul Scholp.; G. A. H. Fraser, \$25.65; Principal Hutton, \$25; A. M. Stewart, K.C., \$25; Alumnae Prize in English (2 yrs.), \$20; The Imperial Oil Coy. a graduate fellowship of \$500.

SPECIAL EVENTS. Visit of the Governor-General, Nov. 8, 1921; Meeting of the American Asscn. for the Advancement of Science, Dec. 1921.

NEW BUILDINGS. Under construction, Anatomical Building; 3 residences purchased.

CHANGES IN CURRICULA, ETC. Arts entrance requirements raised to full Pass Matricn. standing; Med. and For. Matricn. requirements raised by

addition of Hon. Matricn. standing in Engl., Maths. and one of Gk., Lat., Ger., French, Spanish; course in Dent. increased to 5 yrs.; Phys. Train. compulsory upon First Year women students.

UNIVERSITY EXTENSION WORK. Enrolment, 1397; Teachers' Classes and Summer Session, 197; Tutorial Classes, Urban, 110, Rural, 178; W.E.A., Ottawa, 210, Toronto, 98, Hamilton, 50. Special Courses: Journalism, 123; Short Winter, 225; Town-planning, 49; Household Sc., 157.

NUMBER OF STUDENTS. Total registered in 1921-22, 5349. Full-time, preparing for first degrees: Arts, 2028; Med., 1057; Applied Sc., 801; For., 58; Mus., 30; Educ., 234; Vet. Sc., 87; Soc. Ser., 61; Pub. Health Nursing, 44; Grad., 188; Occasional, 485. Women included in the above: Univ. Coll., 546; Vic. Coll., 239; Trin. Coll., 55; St. Mich. C., 109; Grad., 47; Med., 74; Educ., 103; Mus., 14; Soc. Ser., 52; P.H.N., 44; Occasional, 350.

HONORARY DEGREES CONFERRED. *LL.D.*—H.E. The Govr.-Genl., H.E. Sir Auckland Geddes, H.E. Sao-Ke Alfred Sze, Rt. Hon. L. P. Duff, Hon. W. M. Martin, H. Carr, G. Crofts, E. P. Davis, J. Henderson, C. A. Seager; *M.D.*—J. H. Mullin; *D.Sc.*—N. Bateson, L. O. Howard, E. H. Moore, A. P. Coleman, A. B. Macallum; *D.Litt.*—H. R. Fairclough; *Mus.D.*—F. A. Mouré; *D.V.Sc.*—C. D. McGilvray.

OTHER DEGREES. B.A., 361; M.B., 138; B.Sc. (Med.), 1; D.D.S., 174; Phm.B., 92; B.V.Sc., 18; B.A.Sc., 137; B.S.A., 117; B.Sc.F., 11; LL.B., 6; M.A., 56; Ph.D., 7; M.A.Sc., 10; D.V.Sc., 1; M.D., 6; D.P.H., 9; C.E., 7; M.E., 1; B.Pæd., 5; Mus.B., 3.

DEATHS. Profs. G. A. Bingham, J. J. Mackenzie, H. J. Crawford. RETIREMENTS. Profs. A. P. Coleman, D. J. G. Wishart, D. A. Keys, J. A. Craig, A. J. Bell.

# UNIVERSITY OF TRINITY COLLEGE, TORONTO

CHANCELLOR—J. A. WORRELL, K.C., M.A., D.C.L.

VICE-CHANCELLOR AND PROVOST—C. A. SEAGER, M.A., D.D., LL.D.

DEAN OF RESIDENCE—Prof. L. C. A. HODGINS, M.A.

REGISTRAR—Prof. W. A. KIRKWOOD, M.A., Ph.D.

LIBRARIAN—Prof. R. E. L. KITTREDGE, M.A.

PRINCIPAL OF ST. HILDA'S (WOMEN)—Miss M. CARTWRIGHT, B.A.

## PROFESSORS, LECTURERS, ETC., August 14, 1922

[See also the consolidated list under the Univ. of Toronto, names marked (T.).]

<i>Apologetics</i>	[Assoc. Prof.*	Duckworth, H. T. F., M.A. Ox.	
Kingston, G. F., M.A., B.D.			Lectr.*

		The Provost.	Prof.
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<i>Church History</i>	[Assoc. Prof.	<i>Homiletics, etc.</i>	[Spl. Lectr.
Morris, H. C. S., M.A. Ox.		Fotheringham, J. B., B.A.	

Young, A. H., M.A., D.C.L.		<i>Old Testament</i>	[Prof.*
(Canadian C.H.) Spl. Lectr.		Cosgrave, F. H., M.A., B.D. Dub.	

<i>Divinity</i>		<i>Pastoral Theology</i>	
Prof.		The Provost.	Prof.
Rollo, W., M.A. Aberd.	Prof.†		

Trinity College, established in connexion with the United Church of England and Ireland in 1852, was in 1853 granted a Royal Charter as a University. It is federated with the Univ. of Toronto and, in its Faculty of Arts, forms an integral part of it, but in the Faculty of Divinity remains entirely independent and itself confers degrees. Telegraphic address—Trincoll, Toronto.

LIBRARY, 13,000 vols. MUSEUM, Nat. Hist.

COURSES. L.Th.—4 yrs.; Hons. or Pass B.A. of Toronto and Divinity Testamur—5 or 6 yrs., or, with Hons. in Theol., 7 yrs. Candidates for the B.D. or D.D., if resident outside the Eccl. Provinces of Canada, must be graduates in Arts of 3 yrs., or ordained clergymen of 5 yrs.' standing. The D.D. is open to B.D.'s of 5 yrs.' standing.

A SCHOLARSHIP of \$120 p.a. for 2 yrs. is open to students who have taken an Arts course in the Coll.

THE YEAR 1921-22. The new Provost was installed on Nov. 17. Alumni Lectureship in Present-day Church Problems established by the Dean of Ontario. *Number of Students.* Undergrads. in Arts, 139, including 58 women; in Div., 18 (women 2); graduate students in Div., 3. *Retirements.* J. Todd, to be a Research Scholar at Oxford.

PUBLICATIONS. *Yearbook* (July); *Calendar* (May); *Review*, monthly, \$1.50; *St. Hilda's Chronicle*, terminally, \$1.

\* † Also Prof. (\*), Lectr. (†), in the Faculty of Arts.

# VICTORIA UNIVERSITY, TORONTO

PRESIDENT—R. P. BOWLES, M.A., D.D., LL.D

REGISTRAR—C. E. ANGER, B.A.

LIBRARIAN—A. E. LANG, M.A.

Telegraphic Address : Viccollege, Toronto.

## PROFESSORS AND LECTURERS, November 23, 1922

[See also in the consolidated List under Toronto, names marked (V).]

<i>Homiletics, Past. Theol., Ch. Hist.</i>	<i>Religious Pedagogy</i>	
Johnston, A. J., B.A. M. Cox Prof.	Langford, F. W., B.A.	Prof.
<i>New Testament, Greek, etc.</i>	<i>Sociology</i>	[Prof.
Michael, J. H., M.A. Wales.	MacMillan, J. W., B.A., D.D. Manit.	
G. A. Cox Prof.	<i>Systematic Theology</i>	
<i>Public Speaking</i>	The President, M.A., D.D. Wes.,	
Greaves, W. H., M.A. Bos. Prof.	LL.D. Mt. A. & Tor.	
	Ed. Jackson Prof.	

## GENERAL INFORMATION

The Upper Canada Academy was established by Royal Charter in 1836 in connexion with the Methodist Church in Canada. Its name was changed in 1841, when power was obtained to grant degrees in Arts, Theol., Med., and Law, to "Victoria College," and in 1884 to "Victoria University." In 1890 it was federated with Univ. of Toronto, and its Arts Faculty became a College thereof, but it still confers degrees in Theology.

**LIBRARY.** Special features—Canadian verse and Tennysonianiana (C. C. James's collections), Methodism in Canada, Education in Ontario.

**COURSES.** 4 yrs. in Languages, Anc. Hist. and Ethics for B.A., both Pass and Hons.; 3 yrs. for B.D., the 2nd and 3rd yrs. being subsequent to graduation in Arts; 3 yrs.' conference course for probationers for the Ministry following a 2 yrs.' course taken on circuit; 3 yrs.' conference course for graduates.

**HOSTELS** for 120 men and 125 women students.

**PUBLICATIONS.** *Theological Calendar* (May); *Bulletin* (July); *Acta Vict.*, a students' monthly.

## THE YEAR 1921-22

**BENEFACTION.** The M. H. Aikins legacy about \$90,000.

**NUMBER OF STUDENTS.** Full-time, preparing for B.A., 518, including 239 women; M.A., 9; B.D. or Dipl.Th. (graduates), 50; Dipl.Th. (non-grads.), 40; occasional, 37 (7 women).

**HONORARY DEGREES.** D.D.—C. H. Laws (Auckland, N.Z.); A. McCallum (Melbourne); R. H. Bell; R. Whiting; G. B. Lanceley.

**OTHER DEGREES.** B.D.—15; Dipl.Th. (graduates), 15; Dipl.Th. (non-grads.), 10.



# WESTERN UNIVERSITY OF LONDON, ONTARIO

CHANCELLOR—Hon. W. J. ROCHE, M.D., LL.D., M.P.

CHAIRMAN OF THE BOARD OF GOVERNORS—Major A. T. LITTLE.

PRESIDENT—.....

REGISTRAR—Prof. K. P. R. NEVILLE, M.A., Ph.D.

BURSAR—W. WAUGH, M.D., LL.D.

LIBRARIAN—MARJORIE ROSS, B.A.

EXECUTIVE SECRETARY—Lieut.-Col. W. J. BROWN, B.S.A., LL.M.

## PROFESSORS, LECTURERS, ETC., August 1922

<i>Anatomy</i>			
McKibben, P. S., B.S. Granv., Ph.D. Chic., Dean of Fac. of Med.	Prof.	Neville, K. P. R., M.A. Harv., Ph.D. Corn. (C. & Hist.) Prof.	
Macklin, C. C., M.B. Tor.	Prof.	Auden, H. W., M.A. Camb.	Assoc. Prof.
Schaeff, H. E., M.D.	Instr.	<i>Economics</i> , v. Polit. Econ.	
Campbell, F. J. H., B.A., M.D.		<i>Elocution</i>	
	Instr.	Walker, Jean I.	Instr.
Chalk, S. G., M.D.	Instr.	<i>English</i>	
Macklin, M. T., A.B., M.D.	Instr.	Tamblyn, W. F., M.A. Tor., Ph.D.	
Simpson, H. M., M.D.	Asst.	Col.	Prof.
<i>Biology</i>		Spenceley, J. A., B.A. Tor., Ph.D.	
Robertson, A. D., B.A. Tor.	Prof.	Harv.	Asst. Prof.
Hart, N. C., M.A. Tor.		Albright, Evelyn, B.A. Tor.	Instr.
	Assoc. Prof.	Neville, J. T., B.A.	Lectr.
Detwiler, J., M.A. Qu., Ph.D.		<i>French and Italian</i>	
Corn.	Asst. Prof.	Shanks, L. P., Ph.D. Corn.	Prof.
McIntosh, Margaret, B.A.	Asst.	Edwards, B., B.A. Bowd., M.A.	
<i>Chemistry</i>		Prin.	Instr.
Slack, J. A., Ph.C. Mass. C. Ph., M.D.	Prof.	<i>French and Spanish</i>	
Sturdevant, E. G., A.M., Ph.D.		Ellis, O. F. W., B.A. Tor., Ph.D.	
Mich.	Assoc. Prof.	Harv.	Asst. Prof.
Best, N. C., Ph.C. Mass. C. Ph.		Meras, E. A., B.A. Coll. of City of N.Y.	Asst. Prof.
	Lectr.	<i>Geology</i>	
Jackson, H. D., B.A. Mich.	Instr.	Russell, J. W., M.A. McM.	[Assoc. Prof.]
McLean, Mary M., B.A.	Asst.	<i>German</i>	
Rowntree, Gertrude, B.A.	Asst.	James, N. C., B.A. Tor., Ph.D.	
<i>Classics</i>		Halle	Prof.
Fox, W. S., M.A. McM., Ph.D.		<i>Hebrew</i>	
J.H.U., Dean of College of Arts	Prof.	Waller, C. C., M.A. Camb., D.D.	[Prof.]

*History*

Dorland, A. G., B.A. Qu., M.A. Assoc. Prof.  
 Yale  
 Landon, F., M.A. Lectr.

*Mathematics*

Kingston, H. R., M.A. Qu., Ph.D. Prof.  
 Chic.  
 Patterson, W. J., M.A. Qu. Prof.  
 Woods, A., M.A. Qu. Instr.

*Medicine, v. infra**Philosophy*

McKechnie, N. S., B.A., B.Th. Lectr.  
 McM.

*Physics*

[Prof.  
 Dearle, R. C., B.A., Ph.D. Tor.  
 Allen, R. L., M.A. McM. Instr.  
 Blampin, Caroline, B.A. McG. Instr.

*Physiology*

Miller, F. R., M.A., M.B. Tor., M.D. Mun. Prof.  
 Laughton, N. B., B.A. Tor. Instr.  
 Denney, W. L., M.D. Instr.

*Political Economy*

Wood, L. A., B.A. Tor., B.D. Prof.  
 Montreal Presb. Coll., Ph.D.  
 Heid.  
 Perrin, F. E., B.A. Tor. Lectr.  
 Curran, F. H., B.A., LL.B. Lectr.

*Psychology*

[Lectr.  
 Sage, G. B., M.A. Trin., D.D.

**Medicine** (for subjects of first 2 yrs.—Anat., etc., v. *supra*)

*Anæsthesia*

Alexander, N. B., M.D. Assoc. Prof.

*Eye, Ear, Nose, Throat*

Thompson, S., M.D. Prof.  
 Babb, W. F., M.D. Lectr.  
 Hunt, J. C., M.B. Tor. Lectr.  
 Brown, W. J., M.D., C.M. McG. Instr.  
 Armstrong, J. R., M.D. Instr.

*Medicine*

Macgregor, J. A., M.D. Prof.

Childs, J. R. N., M.D.

Assoc. Prof.  
 Hale, J. C., M.D., C.M. McG.

Assoc. Prof.

Fisher, S. M., M.D. Instr.

Campbell, F. J. H., B.A., M.D.

Instr.

Hughes, F. W., M.D. Instr.

Jepson, G. L., M.D. Instr.

Harris, C. A., M.D. Instr.

Bean, S. J. T., M.D. Instr.

Bowman, J. T., M.D. Instr.

Pratten, F. H., M.D. Tor. Instr.

*Obstetrics and Gynecology*

[Prof.  
 Ferguson, R., B.A. Tor., M.D.

Williams, E. L., M.D. Assoc. Prof.

Stevenson, W. J., M.D. Asst. Prof.

Black, H. H., Ph.B., M.D.

Asst. Prof.

Clegg, F. R., M.D. Instr.

Tew, W. P., M.B. Tor. Instr.

*Pathology and Bacteriology*

Bullard, H. H., A.B. Missouri,

Ph.D. Tul., M.D. J.H.U. Prof.

Gordon, J. E., B.S., Ph.D. Chic.

Assoc. Prof.

Luney, F. W., M.D., D.P.H.

Assoc. Prof.

Ramsay, G. A., M.D. Instr.

*Pediatrics*

Tillmann, W. J., M.D. Prof.

Lindsay, J. C., M.B. Tor.

Asst. Prof.

Ferguson, J. I., M.D. Asst. Prof.

Denney, W. L., M.D. Instr.

*Pharmacology*

Crane, J. W., M.B. Tor. Prof.

Young, E. G., B.A., M.Sc.

Asst. Prof.

Le Touzel, J. R., M.D., C.M. McG.

Asst. Prof.

Jepson, G. L., M.D. Demr.

*Psychiatry*

[Assoc. Prof.

Robinson, W. J., M.B. Tor.

Stephenson, G. H., M.B. Tor.

Assoc. Prof.

<i>Public Health</i>	<i>Surgery</i>	[Prof.
Hill, H. W., M.D., D.P.H. Tor., Dean of Inst. of P.H. Prof.	Williams, H., M.D., F.R.C.S. Hodgins, E. L., M.B. Tor.	
Downham, W. S., M.D., D.P.H. Lectr.	Wilson, J. C., M.D. Grant, A. J., M.D.	Assoc. Prof. Instr.
<i>Radiology</i>	Ramsay, G. A., M.D.	Instr.
McNeill, G., M.D., F.A.C.S. Prof.		

## AFFILIATED INSTITUTIONS

HURON COLLEGE. Principal, Prof. of Div. and Hebrew, Rev. C. C. Waller, M.A. Camb. and McG., D.D. Other teachers not on staff of the Univ.: Rt. Rev. Bp. of Huron, D.D., Lectr. in Bib. Exeg.; F. Anderson, M.A. Ox., B.D., Prof. of Ch. Hist.; Dean L. N. Tucker, M.A., D.C.L., D.D.

ASSUMPTION COLLEGE. President, Prof. of Greek, T. J. Muckle, M.A. Eleven other Profs. of Arts subjects.

URSULINE COLLEGE. Dean and Prof. of French, Mother St. Anne. Three other Profs. of Arts subjects.

CONSERVATORY OF MUSIC, BRANTFORD, ONT. Principal, W. Norman Andrews, Dip. Leip.

## GENERAL INFORMATION (v. also p. 280)

Incorporated by an Act of the Provincial Legislature in 1878 as a College in connexion with the Church of England, the Univ. has become, under the provisions of an amending Act of 1908, absolutely undenominational in its government, which is under provincial and municipal control.

FACULTIES. Colleges of Arts, Medical School, Public Health.

DEGREE COURSES. 4 yrs. (from Junr. Matricn.), B.A.; 1 yr. (graduates), M.A.; 6 yrs., M.D. Attendance on part of the classes may be dispensed with by the Senate, but all students must have attended lectures in the Univ. for at least 1 yr. before they can graduate. D.P.H. and C.P.H.N. courses (1 yr.) provided for graduates in Med. and graduate nurses respectively.

PUBLICATIONS. *Calendar* (May); *Western Univ. Gazette*, weekly during term.

## THE YEAR 1921-22

BENEFACTIONS. Ontario Govt., \$200,000; City of London, \$55,000.

NEW DEVELOPMENT. Work begun on Arts College buildings on new site of 260 acres.

NUMBER OF STUDENTS. Total, 636. Medicine, 153; Arts, 478; Graduates, 2; Public Health, 19.

DEGREES CONFERRED. M.A., 2; B.A., 29; B.D., 1; D.P.H., 3; M.D., 18; C.P.H.N., 9.

# THE WEST INDIAN AGRICULTURAL COLLEGE, ST. AUGUSTINE, TRINIDAD

CHAIRMAN OF THE GOVERNING BODY—Sir ARTHUR E. SHIPLEY, G.B.E.,  
LL.D., Sc.D., F.R.S.

VICE-CHAIRMAN—Lieut.-Col. Sir DAVID PRAIN, C.M.G., C.I.E., F.R.S.

PRINCIPAL—Sir FRANCIS WATTS, K.C.M.G., D.Sc.

SECRETARY—ALGERNON ASPINALL, C.M.G., B.A. (14 Trinity Sq.,  
London, E.C.).

REGISTRAR—A. G. HOWELL.

PROFESSORS, January 1, 1923.

*Agronomy*—Dash, Sydney, B.S.A.      *Entomology*—Ballou, H. A., M.Sc.

*Botany*—.....      [Dip.Ag.      *Mycology*—Ashby, S. F., B.Sc.

*Chemistry*—Hardy, F., M.A.,      *Sugar Technology*—.....

## GENERAL INFORMATION

Incorporated in Sept. 1921 as the outcome of recommendations made by the Tropical Agricultural College Committee (appointed by Viscount Milner in 1919) in their Report (Cd. 562), the College aims at promoting the study of Tropical Agriculture in suitable surroundings and creating a body of British expert agriculturists well versed in the knowledge of the cultivation of land in the tropics, of chemists, and of scientific advisers possessing an intimate knowledge of the means of combating pests and diseases. The College buildings are at St. Augustine, near St. Joseph, Trinidad, on land granted by the Govt. of Trinidad and Tobago. The funds of the College are derived from contributions from Colonies and industries participating in the movement and an Imperial grant. The Imperial Department of Agriculture, founded in 1898, was amalgamated with the College on April 1, 1922.

The academic year extends from October 1 to June 30.

**COURSES.** (1) Three-years' Diploma Course for giving a thorough training in the science and practice of T.A. to students intending to become tropical planters, investigators, or experts in different branches of Agr. Science or Technology; (2) one-year course in elementary Agr. Science for students unable to afford (1), with some practical acquaintance with the scientific side of tropical planting and the more up-to-date and efficient methods of production and management; (3) courses for Agr. officers selected for Colonial service in T.A. departments.

**POST-GRADUATE RESEARCH.** Facilities are provided for work in connexion with problems arising in T.A., and more especially those connected with plant pathology, agronomy, and physiological botany.

**TUITION FEES:** £50 p.a., but a limited number of students from contributing Colonies and industries are admitted, on the nomination of the respective local Govts. and industries, without the payment of tuition fees; other students from contributing Colonies, £25 p.a.

# THE UNIVERSITIES OF AUSTRALIA

ADELAIDE	MELBOURNE	QUEENSLAND, BRISBANE
SYDNEY	TASMANIA, HOBART	WESTERN AUSTRALIA, PERTH

## GENERAL DESCRIPTION

[Summary, corrected to Sept. 1922, of information issued in June 1919 by an Administrative Committee of the Australian Universities through the Education Service of the Australian Imperial Force of which the Committee was a part.]

THE Universities of Australia are dotted all round the Commonwealth and are at great distances from one another and in diverse climates. The mean annual temperatures range between about 70° at Brisbane and 54° at Hobart. Western Australia's nearest neighbour is Adelaide, which is about 1600 miles away by the shortest route. There is, naturally, not much moving about of students from one to another; but in the three younger some of the principal professional courses are not yet provided, and it frequently happens that a student after working in one of them for a year or two transfers to one of the older and more central Univs. where he is granted status in his professional course. As the Univs. are not all uniformly developed, they cannot be quite uniform even in their requirements for entrance. But they exercise all possible reciprocity in the interchange of students. They also give students who come from British Univs. the same status as at Home. Typical of their attitude in this regard is the By-law of Sydney: Undergraduates of other Univs. may, at the discretion of the Professorial Board, be admitted *ad eundem statum* in this Univ. without examn. Provided always that they shall give sufficient evidence of their alleged status and of good conduct.

THE COLLEGE SYSTEM. When the Univs. of Sydney and Melbourne were founded provision was made for the establishment of "Colleges of Residence in connexion with different religious denominations." So there came into existence at Sydney, and on the Univ. grounds, "St. Paul's" (Church of England), "St. John's" (R.C.), "St. Andrew's" (Presb.), an undenominational College for women, and "Wesley" (Meth.). Similarly at Melbourne, the first College, "Trinity" (C. of E.), was opened in 1872, and was followed by "Ormond" (Presb.), "Queen's" (Meth.), and "Newman" (R.C.). "Queensland" has "Emmanuel" (Presb.), "St. John's" (C. of E.), "King's" (Meth.), and an "undenominational" Women's Coll., as well as St. Leo's (R.C.). There are no other Univ. Colls. in Australia. All these are self-governing and receive no financial aid from the Univ. They accommodate and teach only a small proportion of the whole number of Australian students; but their importance and influence on Univ. life are not to be gauged by this circumstance.

**CONSTITUTIONS.** The outstanding feature of the Australian Univ. constitutions is the definite and considerable part taken by the State in appointing members of their governing bodies. This is due to the large contributions made to them out of public funds. The newest Univs. have admitted divers other persons, such as representatives of commercial, industrial, scientific, and educational societies, or benefactors, to participate with their graduates in the election of senators or councillors. The constitution of Sydney is the simplest; that of Queensland is the most comprehensive in its legal conception of the Univ. as "a body corporate consisting of Senate, Council, and graduate and undergraduate members." Western Australia, however, is the only Univ. where undergraduates are enrolled by Act of Parliament in a "Guild" which is given a representative on Convocation, the electing body that may also disallow or propose amendments in any legislation of the Senate.

**ADMISSION.** Attempts have been made to devise a common matricn., but, so far, they have failed. The reason for this is that the Univs., although they are developing on very similar lines, and attaining very similar standards, are maintaining a certain amount of individuality. Generally speaking, matriculation requirements include passing a recognized examn. (school-leaving, matricn., etc.) in English, another approved language (at Sydney, *e.g.*, Latin, Greek, French, German, or Japanese), Mathematics, and one or more other subjects. Sydney, Queensland, Tasmania, and Western Australia offer special facilities for matriculation in some faculties to persons who have attained the age of 25 yrs., provided (Sydney) they give evidence of distinct educational merit and are recommended by a three-fourths majority of the Senate.

**THE UNIVERSITY AND THE PROFESSIONS.** The Univ. has always at least one professional school. Thus Queensland's School of Engineering has a high repute. Western Australia is making a specialty of Agriculture. Tasmania has no professional school but Law. Sydney, Melbourne, and Adelaide have each a wide range of schools.

The Engineering schools give a thorough practical training. Rather high entrance requirements are called for in each of the Univs. The curricula extend over 4 yrs. (W. Australia, 5 yrs.), and are arranged with the definite view of giving a sound knowledge of the properties of materials, and the principles of Maths., Phys., Chem., and Mechanics underlying all engineering work, before specialized professional subjects are taken. Owing to several large bequests the Russell School of E. in Sydney is the most fully equipped. It maintains separate depts. for Civil, Mech., and Elec. E., for Mining and Metall., and for Archit. and Building Construction. The corresponding Schools in Queensland and Melbourne are also well equipped, and those of Adelaide and Western Australia, although not so comprehensive, are efficient. Systematic arrangements are made for students to obtain practical experience in workshops or in the field during vacations. The University training is widely recognized as a necessary qualification for professional positions. As a rule graduates in Civil E. enter the State or

Federal Public Works Depts., which carry out practically all the large national engineering works, very little in the way of Public Services being left to private enterprise. The experience thus to be gained is very good, although it must be admitted that the emoluments are relatively low. Many graduates in Mining E. have been absorbed in the mining industries of Australia, but a great number—probably the majority—find their way to the larger mining centres of the world where the financial rewards are usually greater. There is a good deal of industrial and commercial engineering in Australia, and men wishing to have the freer scope which this offers usually take the courses in Mech. and Elec. E. In Archit., especially the domestic kind, there is a promising outlook in practically all parts of the Commonwealth.

The Medical Schools of Sydney, Melbourne, and Adelaide are among the best in the Empire. They comply with the requirements of the General Medical Council, and there is full reciprocity, in respect of registration of degrees as qualifications to practise, between the U.K. and Australia. The greater part of the Australian medical profession is now trained in these 3 Univs., and distinguished teachers and research workers are continually being brought in to supplement their staffs. High positions are also held by their graduates outside Australia. It is generally felt by Australian medical men who have had experience in Europe among men trained in the Schools of the U.K., that their own training has been even more practical. It is thoroughly British in scope and method, but, in the proportion of hospital facilities to the number of students, it has had some advantages over the training received by the average British student. Whether this impression is or is not correct, it remains true that Australian medical education has reached a high standard, and the equipment of the Faculty is always good and often excellent. Sydney has the advantage of an immense public hospital, on its own grounds, with another a short tramway journey distant. In Melbourne general hospitals containing 500 beds, and women's and children's hospitals are close to the Univ. The Genl. Hospl. at Adelaide is within half a mile of the Univ., and after the 2nd yr. the greater part of students' time is spent in it. The work done may also be supplemented by study, after graduation, in the "Australian Institute of Tropical Medicine" at Townsville in Queensland; and a Diploma in Trop. Med. is attainable. The Hall Research Institute in connexion with the Melbourne Hospl. provides facilities for post-graduate work.

In all the Univs. the Faculty of Arts is becoming, with due help from the Faculty of Science, a professional school for teachers. Sydney and Melbourne have Profs. of Education who are also heads of the State Training Colleges. Adelaide has the State Director of Education on its Ed. Committee and Council, and gives a Diploma to graduates in Arts and Science who take a prescribed course of prof. study and have proper experience of teaching. There is a course in Ed. at Queensland and every facility is given to teachers to graduate in Arts. Western Australia has a Dept. of Ed., but it is not yet fully organized. An excellent professional equipment for teaching can now be obtained in Australia and the material rewards of teaching are likely to increase.

The less anciently established professions become associated with the Univs. on obtaining a higher status or a legal organization. Thus Vet. Science, the practice of which is as yet legally controlled in only two States, is now regularly entered in one of these (Victoria) through a Univ. course of study. In N.S.W. its legal constitution will certainly follow the recent institution of a Faculty of Vet. Science at the Univ. of Sydney. In Western Australia, whose Univ. also has a Dept. of Vet. Science, the law requires such qualifications for vet. practice that a Univ. training will become the natural approach to the profession in that State.

**PERIODS OF STUDY.** The Univ. requires 3 yrs.' study for a B.A. or B.Sc. The curriculum for the first degree in Med., hitherto 5 yrs., is being lengthened; in Melbourne and Sydney it is 5½ yrs. (17 terms). The time needed to graduate in law may vary; thus Melbourne course takes 4 yrs., but Sydney allows Arts graduates, if they can, to do the prof. studies in 2 yrs. To graduate in Engin. requires 4 yrs.; in Vet. Science, in Agric., and in Dentistry also 4 yrs., subject to certain minor variations.

**ACADEMIC TERMS.** In Australia qualifications are reckoned in "Years" and "Courses." But each "Year" is divided into "Terms." The number of Terms in the Year is usually 3. The Year begins in March and ends in Nov. or Dec. The "Long Vacation" comprises Dec., Jan., and Feb., which are the warmest months. Melbourne has 4 terms, the First of 12 weeks; the Second of 10; the Third of 10; and the Fourth, or Examn. Term, of 4. Tasmania also has 4 terms. Queensland has 3 terms and 2 Examn. Periods.

**FEES AND COST OF LIVING.** The cost of living varies a good deal in different parts of Australia. A student will probably not notice much difference between Sydney and Melbourne in this respect. But anywhere he will find that £175 a year gives him quite sufficient means, for the climate is benign and good food is plentiful. The style of living everywhere is unostentatious. Decent board and lodging should not cost more than 30s. a week. The Univ. "Unions" provide good meals at about cost price, from 6d. to 2s. each, together with all the other comforts of a clubhouse, for £1 or less a year. Exercise in rowing, football, cricket, and other games may be had in the Sports Clubs on correspondingly easy terms.

Residence at a College is optional. College fees for residence and tuition range from 80 to 100 gs. per annum. Thus Wesley College, Sydney (Methodist), charges 28 gs. a term for resident students; Ormond, Melbourne (Presb.), from 95 to 110 gs. a year for residence during terms, according to the course being taken. St. John's, Queensland (Anglican), has fees of £21 per term. Special arrangements can always be made for residence during vacations and, for an example, Ormond then charges 2 gs. a week. Many men live in College on a total income of not more than £150 a year; it is doubtful if any will spend double that amount. There are few rich students and no tradition of expensive living among College men, no charming but costly ancient customs. The assistance from Scholarships and Bursaries is generous.

A list of Univ. Fees payable at Melbourne and Sydney is given



below. The fees at Tasmania are very small, 4 or more subjects a year costing only 10 gs., and a year's work in the laboratory not going beyond 4 gs. Queensland has composition fees for complete degree courses, which are from 12 to 18 gs. a year in Arts, 20 gs. in Science, and 21 gs. in Engineering. W. Australia charges fees for exams., degrees, and certifs., but tuition fees only to overseas students. Fees at Adelaide do not differ widely from those at Melbourne and Sydney.

*Melbourne.* Matricn., 1 g.; Degree, 7 gs.; Degree Courses in Arts, 3 yrs., 36 gs.; Science, £22 each yr.; Agric., 4 yrs., 90 gs.; Laws, 4 yrs., 72 gs.; Med., 5½ yrs., £215 (including Hospl. Fees); Engin., 4 yrs., £94; Vet. Sc., 4 yrs., £97; Music, 3 yrs., at conservatorium, 32 gs. p.a.

*Sydney.* Matricn., £3; Degree in Arts, Econ., Sc., Agric., or Vet. Sc., £3; M.D. and M.S., 20 gs.; other Degrees, £10; Degree Courses in Arts, 3 yrs., £75; Econ., 4 yrs., £96; Law, £90 (Arts subjects additional); Med., £196 (excluding Hospl. Attendance, 10 gs., and practical Midwifery, 5 gs.); Dent., 4 yrs., £150 (including Dent. Hospl. £10 p.a.); Science, 3 yrs., £99; Engin., 4 yrs., £154 (Min. and Met., £168); Agric., 4 yrs., £118: 10s.; Vet. Sc., 4 yrs., £114; Archit., 4 yrs., £168.

#### CONFERENCE

After a conference held at Sydney in May 1920 the Australian Univs. established a Standing Advisory Committee to deal with matters of common interest. The temporary headquarters of the Committee are in Melbourne. The Chancellor of Melbourne Univ. acts for the time being as Convener of the Committee, and the Registrar as Honorary Secretary.

A conference of representatives of the Univs. was held in Melbourne in May 1922. Steps were taken to ensure that the short vacations in autumn and spring should be to a large extent common to all the Univs. so as to facilitate, for the staffs, the holding of conferences and congresses and, for students, the holding of inter-University competitions. With a view to securing more uniformity in the standards and titles of Australian degrees, the several Univs. were asked to furnish reports to the Standing Advisory Committee. Representations were made to Oxford, Cambridge, and London, asking for further credit for Australian students for work done in Australia. The question of holding degree exams. in country centres for Arts and Law students who do not attend lectures was discussed: several Univs. already hold such exams. to a limited extent. A statement of policy in this connexion was agreed to.

AUSTRALIAN STUDENTS IN THE HOME UNIVERSITIES, v. Appendix XXII.

# UNIVERSITY OF ADELAIDE

VISITOR—H.E. THE GOVERNOR.

CHANCELLOR—Hon. Sir G. J. R. MURRAY, K.C.M.G., B.A., LL.M.,  
Lieut.-Governor and Chief Justice.

VICE-CHANCELLOR—Prof. W. MITCHELL, M.A., D.Sc.

REGISTRAR—C. R. HODGE.

## PROFESSORS, LECTURERS, ETC., September 1, 1922

<i>Accountancy</i>		Steele, R. M., A.C.U.A. (Com.	
Booth, S. R., B.A. Camb.	Lectr.	Practice)	Lectr.
Wauchope, J. G. N., A.C.U.A.		<i>Dental Science</i>	
	Asst.	Lectrs. : [(Prosthetics).	
<i>Anatomy</i>	[Elder Prof.	Chapman, A. I., D.D.S.	
Wood-Jones, F., M.B., M.R.C.S.,		Reid, F. W., B.Sc. (Metal).	
L.R.C.P., D.Sc. Lond.		Trott, L. W., D.D.S. (Mat. Med.,	
Scott, M. L., M.B., M.S., F.R.C.S.		etc.).	
	Lectr.	Fuller, W. (Histology).	
Lendon, G. A., M.B., B.S.	Demr.	Swan, F. M., L.D.S. (Operative D.).	
<i>Botany</i>	[Prof.	Millhouse, E. J. (D. Surg. & Path.).	
Osborn, T. G. B., M.Sc. Manc.		Smeaton, B., M.B., B.S. (Surg.).	
Samuel, G., B.Sc.	Demr.	Southwood, A. R., M.D. (Med.).	
<i>Chemistry</i>		Newling, P. R., D.D.S. (Ortho-	
Rennie, E. H., M.A. Syd., D.Sc.		dontics).	
Lond. and Melb. Angas Prof.		<i>Economics</i> , v. also Com.	
Cooke, W. T., D.Sc.	Lectr.	Mackay, A. L. G., B.A., Dip.Ed.	
Pennycuick, S. W., M.Sc. Q'ld.		Syd.	Asst. Lectr.
	Lectr.	<i>Education</i>	[Lectr.
Finlayson, H. H.		Schulz, A. J., Ph.D. Zur., M.A.	
	Asst. Lectr. & Demr.	<i>Engineering</i> , v. also Mining	
<i>Classics and Comp. Philol. and</i>		Chapman, R. W., M.A., B.C.E.	
<i>Lit.</i>	[Hughes Prof.	Melb.	Prof.
Naylor, H. D., M.A. Camb.		<i>Engineering, Elec.</i>	
Hollidge, D. H., M.A.	Asst. Lectr.	Clark, E. V., B.Sc.	Lectr.
<i>Commerce</i> , v. also Acctcy.		<i>English Lang. and Literature</i>	
Heaton, H., M.A. Leeds, M.Com.		Strong, A. T., M.A. Ox., Litt.D.	
Birm., D.Litt. Leeds (Econ.			Jury Prof.
& Indust. Pract.)	Lectr.	<i>Forestry</i>	
Clucas, R. J. M., B.A. (Ec. Geog.)		Corbin, H. H., B.Sc. Lond.	Lectr.
	Lectr.	Lea, A. M., F.L.S. (Entomology)	
Finlayson, R. N., LL.B. (Indust.			Lectr.
and C. Law)	Lectr.	<i>French</i>	
Ham, W. (Aus. Industries)	Lectr.	Crampton, J., B.A. Lond.	Lectr.
Sutton, J. (Bank. & Exch.)	Lectr.		

*Geology and Mineralogy*

Mawson, Sir Douglas, B.E., B.Sc.  
 Syd., D.Sc. Prof.  
 Madigan, C. T., B.A. Ox., B.Sc.  
 Lectr.

*History, Modern*

Henderson, G. C., M.A. Ox. Prof.  
 Oldham, W., M.A. Asst. Lectr.

*Law*

Phillipson, C., M.A., LL.D., Litt.D.  
 Vict., Manc., Barr.-at-Law  
 Prof.  
 Napier, T. J. M., LL.B. (Ev. and  
 Proc.) Lectr.  
 Rudall, R. J., LL.B. (Const. L.)  
 Lectr.  
 Finlayson, R. N., LL.B. (Roman  
 L.) Lectr.  
 Thomson, H., LL.B. (Wrongs)  
 Lectr.

*Mathematics*

Wilton, J. R., M.A. Camb., D.Sc.  
 Elder Prof.  
 Sanders, H. W., B.A. Lectr.

*Medicine, v. infra**Mining Engineering*

Gartrell, H. W., M.A. Col., B.A.,  
 B.Sc. Lectr.

*Music*

[Elder Prof.  
 Davies, E. H., Mus.D.]

*Philosophy*

[Hughes Prof.  
 Mitchell, W., M.A., D.Sc. Edin.  
 Jackson, Sarah E., M.A. Tutor]

*Physics*

Grant, K., M.Sc. Melb. Prof.  
 Burdon, R. S., B.Sc. Lectr.  
 Reimann, A. L., B.Sc. Evg. Lectr.

*Physiology*

Robertson, T. Brailsford, Ph.D.  
 Calif., D.Sc. Prof.  
 Fuller, W. (Lectr. in Biol.) Demr.

*Zoology*

Johnston, T. Harvey, M.A., D.Sc.  
 Syd. Prof.  
 Tiegs, O. W., B.Sc. Q'ld.  
 Asst. Lectr.

Medicine (for subjects of first  
 2 yrs.—Anat., etc., v. *supra*.)

*Diseases of Children, Med.*

Gunson, J. B., M.B. Clin. Lectr.

*Diseases of Children, Surg., v.  
 also Obstetrics*

Newland, H. S., M.B., M.S.  
 Clin. Lectr.

*Forensic Medicine*

Rogers, R. S., M.A., M.D., Ch.M.  
 Edin. Lectr.

*Gynaecology*

Wilson, T. G., M.D. Syd.  
 Way Lectr.

*Materia Med. and Therap.*

Fry, H. K., B.Sc., M.B., B.S. Lectr.

*Medicine and Therap.*

Swift, H., M.D. Camb. Lectr.  
 Verco, J. C., M.D. Lond., F.R.C.S.  
 Eng. Lectr.

*Medicine, Clinical*

[Lectr.  
 Hone, F. S., B.A., M.B., B.S.  
 De Crespigny, C. T. C., M.D., B.S.  
 Melb., M.R.C.P. Lectr.]

*Medicine, Psychol.*

Downey, M. H., M.B., B.S. Melb.  
 Lectr.

*Obstetrics and Dis. of Children*

Lendon, A. A., M.D. Lond. Lectr.

*Ophthalmic Surg.*

[Gosse Lectr.  
 Morgan, A. M., M.B., B.S.]

*Otology*

Pulleine, R. H., M.B. Syd. Lectr.

*Pathology*

Cleland, J. B., M.D. Syd. Prof.  
 Barlow, D. L., M.B., B.S. Asst.

*Public Health & Preventive Med.*

Hone, F. S., B.A., M.B., B.S.  
 Lectr.

*Surgery*

Cavenagh - Mainwaring, W. R.,  
 M.B., F.R.C.S. Lectr.

*Surgery, Clinical and Operative*

Newland, H. S., M.B., M.S. Lectr.

*Tutor in Medicine*

Ray, W., B.Sc., M.B., B.S.

*Tutor in Surgery*  
Smeaton, B., M.B.

*Clinical Teachers*  
The Staff of the Adelaide and of  
the Children's Hospls.

*Tutor in Obstetrics*  
Wilson, T. G., M.D., Ch.M. Syd.,  
F.R.C.S. Edin.

*Tutorial Classes*  
Heaton, H. (v. Commerce), Direc-  
tor, assisted by 8 tutors.

## ASSOCIATED OR AFFILIATED INSTITUTIONS

S. AUSTRALIAN SCHOOL OF MINES AND INDUSTRIES. President, Hon. Sir L. Bonython. Unites with the Univ. in providing courses and examns. in Mining, Metall., and Engin. The Chancellor is Chairman of the Joint Board.

ROSEWORTHY AGRICULTURAL COLLEGE. Affiliated for parts of the B.Sc. course for Agric. students.

PERTH TECHNICAL SCHOOL. Affiliated to this Univ. as well as to W. Aus. for courses in Phys. Chem., etc.

## GENERAL INFORMATION (v. also p. 367)

The Univ. was established by Act of the Provincial Legislature in 1874 with endowments of £40,000 from Sir W. W. Hughes and Sir T. Elder, and a land grant of 50,000 acres (subsequently repurchased by Govt. for £40,000) as well as a site of 5 acres in the city and a recurrent money grant. Sir T. Elder died in 1897 leaving £65,000 to the Univ. In 1911 the State Parliament sanctioned an additional annual grant and took power to appoint 5 additional members of the Council which, until then, consisted of 20 elected by the Senate. In 1914-19 Mr. Peter Waite presented to the Univ. approximately £55,000 and extensive estates, including a mansion, and in 1920 Sir J. L. Bonython gave £40,000. The annual Govt. grant raised in 1919 by £20,000 is now about £35,000. The value of the endowments is £400,000.

LIBRARY, over 50,000 volumes. LABORATORIES, Biol., Bio-Chem., Bot., Chem., Path., Phys. The Univ. assists in the management of a Public Library, MUSEUM and ART GALLERY, and controls the ELDER CONSERVATORIUM (annual fee, 14 gs.).

FACULTIES. Arts, Science, Law, Medicine, Dentistry, Music, Applied Science (including Staff of S. Aus. School of Mines and Industries).

DEGREES. Obtainable after 3 yrs.' course, B.A., B.Sc., Mus.B.; 4 yrs.', LL.B., B.E., B.D.S.; 6 yrs.', M.B., B.S.

HIGHER DEGREES. Open to bachelors of 2 yrs.' standing, M.A., M.E.; 3 yrs.', D.Sc., LL.D., M.D., M.S., Mus.D.

DIPLOMAS. Applied Science (Mining, Metall., or Engin.—Civ., Elec., Mech., or Archit.), 4 yrs.' course; Commerce (A.C.U.A.) evening courses; Education (post-graduate); Forestry, 2 yrs.'; Music (A.M.U.A.), 3 yrs.'

A "Final Certificate in Law" for admission as a practitioner in the Supreme Court is obtainable by articled clerks on a curriculum less extensive than that for the LL.B.

The Univ. conducts PUBLIC EXAMNS. of various grades, irrespective of those for its own degrees, etc.

SCHOLARSHIPS, etc., for graduates. Angas Engineering, £200 p.a. for 2 yrs., not open to graduates of other Univs.; several smaller.

ADULT EDUCATION. Tutorial classes were established in 1918. The subjects taught are Engl. Lit., Psychology, Mod. Hist., Economics, Polit. Sc., Music. At the Univ. the courses extend over 3 yrs. Four classes are held in country centres. Public lectures given occasionally.

CALENDAR publ. in Feb. Price 2s. 6d.

GRADUATES' ASSOCN. Hon. Sec.—D. H. Hollidge, Box 498, G.P.O.

## THE YEAR 1921-22

BENEFACTIONS by Old Scholars: J. L. Young, £200 (further endowment for research); Tormore House School, £130 for prizes; Miss Martin's School, £150 for prizes.

NUMBER OF STUDENTS. Preparing for first degrees, 768; for M.A., 18. Non-graduating students, 552. Conservatorium, 583.

DEGREES CONFERRED. B.A., 18 (including 10 women); B.Sc., 12 (2 women); B.E., 10; M.B., B.S., 11; B.D.S., 6; LL.B., 10 (including 2 women); M.A., 1; M.E., 1; M.D., 1; M.S., 1.

DEATHS. B. Poulton, M. M. Maughan, Peter Wood.

ADULT EDUCATION. Total enrolment, 700.

# UNIVERSITY OF MELBOURNE

VISITOR—H.E. THE GOVERNOR.

CHANCELLOR—Sir J. H. MACFARLAND, M.A., LL.D.

VICE-CHANCELLOR—Sir J. GRICE, B.A., LL.B.

REGISTRAR—J. P. BAINBRIDGE, F.I.C.A., F.C.I.S., J.P.

ASSISTANT REGISTRAR—S. S. ADDISON, M.B.E., B.Sc. Adel.

LIBRARIAN—E. D. ULRICH, M.A.

## PROFESSORS, LECTURERS, ETC., September 2, 1922

[(H)=Hon. Lectr. ; (E)=Evening Lectr.]

### *Agriculture*

Richardson, A. E. V., M.A., B.Sc.  
Adel. Dir. of School & Lectr.

McLennan, Ethel I., D.Sc. Lectr.  
Cookson, Isabel C., B.Sc. Demr.  
Gordon, Mary, B.Sc. Demr.

*Agric. Engineering* [Lectr.  
Rennie, E. J. C., M.E. Adel.

*Chemistry*, v. also Bio-Chem.  
Masson, Sir D. O., K.B.E., M.A.,  
D.Sc. Edin., F.R.S. Prof.  
Green, W. H., D.Sc. Lectr. & Demr.  
Rivett, A. C. D., M.A., B.Sc. Ox.,  
D.Sc. Assoc. Prof.

### *Anatomy*

Berry, R. J. A., M.D., Ch.M.,  
F.R.C.S. Edin. Prof.  
Anderson, J. H., C.M.G., C.B.E.,  
M.D. Lectr.  
Brown, C. J. O., M.B., B.S.  
Stewart Lectr.

Hartung, E. J., D.Sc. Lectr.  
Sugden, Ruth, M.Sc. Demr.  
Ampt, G. A., B.Sc. Demr.  
Scott, Margaret E., B.Sc. Demr.

### *Anat., Regional and Applied*

Newton, H. A. S., M.B., M.S.,  
F.R.C.S. Eng. Lectr.

*Classical Philology*  
Scutt, C. A., M.A. Camb. Prof.

### *Architecture*

Gawler, J. S., A.R.V.I.A. Lectr.  
Sutherland, G. J., Dip. Arch. Asst.  
Alsop, R. H., F.R.I.B.A.,  
F.R.V.I.A. Dir. of Atelier.  
Irwin, L., A.R.I.B.A. Asst.  
Henderson, A. M., M.C.E. (H.).  
Clark, E. J., F.R.V.I.A. Lectr.

*Classics*  
Kerry, W., M.A. Lectr.  
Cornwall, E. W., B.A. (E.).

*Dentistry*, v. Affiliated Colls.

### *Dutch*

Lodewyckx, A. (v. German) Instr.

### *Bacteriology*, v. Med.

*Economics*, v. Pol. Econ.

### *Bio-Chemistry*

Young, W. J., M.Sc. Manc., D.Sc.  
Lond. Lectr. & Demr.  
Young, Bertha D. S., B.Sc. Demr.

*Education* [Prof.  
Smyth, J., M.A., D.Phil. Edin.  
Sharman, M. S., M.A., M.Sc.  
(Maths. & Sc.) Lectr.

### *Botany & Plant Physiology* [Prof.

Ewart, A. J., D.Sc. Lond. & Ox.,  
Ph.D. Leip., F.L.S., F.R.S.

Marshall, Ida D., M.A. (Engl. &  
Hist.) Lectr.  
Lawson, R., M.A. (Langs.) Lectr.

- Engineering*, v. also Agric., Arch., Metall., Mining [Prof. Webb, Jessie S. W., M.A. Lectr.  
Payne, H., M.I.C.E., M.I.M.E. Roberts, S. H., B.A. Lectr.  
Lectrs.: Penington, Frances E., M.A. Tutor.
- Japanese*  
Upton, T. H., O.B.E., M.Sc., Inagaki, M. Instr.  
M.C.E., A.M.I.C.E. (Civ. E.).  
Sexton, C. W. N., B.C.E. (Civ. E.).  
Lectr. & Demr.
- Law*  
Kernot, W. N., M. Mech. E., Moore, W. H., C.M.G., B.A.  
M.I.C.E. (Design, etc.). Camb., LL.B. Lond., LL.D.  
Prof.
- M'Carthy, C. P., B.Sc. (Design, Sproule, W. S., M.A., LL.B. (Con-  
etc.) Asst. Lectr. & Demr. tracts, etc.) Lectr.
- Brown, E. B., M.Sc., A.C.G.I. Mackey, Sir J. E., M.A., LL.B.  
(Elec. E.). (Equity) Lectr.
- Melbourne, H. E. S., B.E. Adel, Gregory, R. H., LL.B. (Land, etc.)  
L.S. (Surveying). Lectr.
- Laing, J. A., M.C.E. (Concrete). Maguire, J. R., B.A., LL.B.  
Millar, S. J., B.E. (Lubrication). (Wrongs, etc.) Lectr.
- Callaway, A. E., C.E. (Roads). Fullagar, W. K., LL.B. Tutor.
- Bassett, W. E., B.C.E. (Mech. E.) O'Bryan, N. J., LL.B. Tutor.  
Asst. Lectr. & Demr.
- 3 Demrs.
- English Lang. and Lit.*  
Wallace, R. S., M.A. Ox. Prof.
- Price, W. T., M.A. Lectr. (E.).
- Rosenblum, Loris C., M.A. Tutor.
- Berry, Beatrice M., B.A. Tutor.
- French*  
Chisholm, A. R., B.A. Syd. Lectr.
- Rouel, T., B. ès L., O.A. (E.).
- Geology and Mineralogy*  
Skeats, E. W., D.Sc. Lond.,  
A.R.C.Sc., F.G.S. Prof.
- Summers, H. St. J., D.Sc.  
Assoc. Prof.
- Chapman, F., A.L.S. (Palæont.)  
Lectr.
- McInerny, Kathleen M. M., M.Sc.  
Demr. & Asst. Lectr.
- Singleton, F. A., M.Sc. (Agric. G.)  
Lectr.
- German* [Assoc. Prof.]  
Lodewyckx, A., M.A., Litt.D.
- Histology and Human Embryol.*  
Hurley, L. E., M.D., M.S.  
Lectr. & Demr.
- History*  
Scott, E. Prof.
- Mathematics, Pure and Mixed*  
Michell, J. H., M.A. Camb., F.R.S.  
Prof.
- Gundersen, G., B.Sc. Lectr.
- ..... Lectr.
- ..... Lectr.
- Medicine, v. infra*
- Metallurgy*  
..... Lectr.
- Thompson, P. F. Lect. and Demr.
- Mining*  
Merrin, A. H., M.C.E. Lectr.
- Music*  
Laver, W. A. Ormond Prof.
- Natural Philosophy* [Prof.]  
Laby, T. H., M.A., Sc.D. Camb.
- Glasson, J. L., D.Sc. Lectr.
- Love, E. F. J., M.A., D.Sc.,  
F.R.A.S. Lectr. & Demr.
- Hercus, E. O., M.Sc. Lectr.
- Holmes, W. M., M.A., B.Sc.  
Lectr. & Demr.
- Rossiter, A. L., M.Sc. Demr.
- Allen, Natalie C. B., B.Sc. N.Z.  
Demr.
- 2 other Demrs.
- Philos., Mental & Moral* [Prof.]  
Gibson, W. R. B., M.A., D.Sc. Ox.

Stewart, J. McK., B.A., D.Phil.  
Edin. Assoc. Prof.  
Rosenblum, Vera A., M.A. Tutor.  
Murray, C. H., B.A. Tutor.

*Physics*, v. Nat. Phil.

*Physiology*

Osborne, W. A., M.B., B.Ch. Belf.,  
D.Sc. Tüb. Prof.

Maxwell, L. A. I., M.Sc., B.Agr.Sc.,  
M.D., B.S. (also *Anæsth.*)

Lectr. & Demr.

Barrett, Sir J. W., K.B.E., C.B.,  
C.M.G., M.D., M.S., F.R.C.S.  
Eng. (P. of Spec. Senses) (H.).  
2 Demrs.

*Political Economy*

Kelly, E. C. W., LL.M. Lectr.  
Foennander, O. de R., LL.M. (E.).

*Pub. Health*, v. Med.

*Sociology*

Philips, P. D., M.A. Tutor.

*Spanish*

Fernandez, R. C. Instr.

*Vet. Sc.*, v. *infra*

*Zoology*

Agar, W. E., M.A. Camb., D.Sc.  
Glas., F.R.S. Prof.

Sweet, Georgina, D.Sc. (also Lectr.  
in Vet. Parasit.) Assoc. Prof.

Buchanan, Gwynneth V., D.Sc.  
Lectr. & Demr.

Raff, Janet W., M.Sc. Demr.

Medicine (for subjects of first  
2 yrs.—Anat., etc., v. *supra*)

*Anæsthetics*

Davies, F. L., M.B., B.S. Lectr.

*Bacteriology*

Bull, R. J., M.D., B.S. Lectr.

Rennie, Hilda M., M.B., B.S. Demr.

*Clinical M. and Clin. Surg.*

Staffs of the Melb., Alfred, and St.  
Vincent's Hospls.

*Ethics, Med.*

[Lectr.  
Anderson, A. V. M., M.D., B.S.

*Forensic M.*

Mollison, C. H., M.B., B.S.,  
M.R.C.S. Eng. Lectr.

*Mat. Med. and Pharmacy*

Stanton, B. L., M.B., B.S. Lectr.

*M. Theory and Practice*

Latham, L. S., M.D., B.S., M.A.  
Stewart Lectr.

*Obst. and Gynæc.*

[Lectr.  
Morrison, R. H., M.D., C.M. Edin.

*Pathology*

[Prof.  
Allen, Sir H. B., M.D., B.S., LL.D.

Apperly, F. L., M.A., D.M. Ox.,  
M.R.C.S., L.R.C.P. Lectr.

Adey, C. W., M.D., B.S.

Stewart Lectr.

Moore, W. H. J., M.B., B.S. Demr.

*Pub. Health*

[Lectr.  
Sinclair, T. W., M.D., B.S., D.P.H.

*Radiology*

[Lectr.  
Cross, K. S., M.Sc., M.D., B.S.

*Surgery*

[Stewart Lectr.  
Kilvington, B., M.D., M.S.

*Therapeutics*

Turnbull, H. H., M.D., B.S. Lectr.

*Venereal Diseases*

Morris, A. E., M.B., B.S. Lectr.

*Veterinary Science*

[Prof.  
Woodruff, H. A., M.R.C.V.S.,  
M.R.C.S. Eng., L.R.C.P. Lond.

*V. Anat. and Surg.*

Lewis, J. C., B.Sc., D.V.Sc., M.B.,  
B.S. Lectr.

*V. Hygiene and Diet.*

Cameron, S. S., D.V.Sc.,  
M.R.C.V.S. Lectr.

*V. Med. and Obst.*

Bordeaux, E. F. J., B.V.Sc.,  
B. ès L., G.M.V.C. Lectr.

*V. Pathology, etc.*, v. also Zool.

Seddon, H. R., D.V.Sc. Lectr.

*University Extension*

Gunn, J. A., M.A., Litt.D. Liv.  
Dir. of Extra-Mural Education.

15 Tutors.



## AFFILIATED COLLEGES (v. also p. 367)

I.—RESIDENTIAL—Controlled by representatives of the Churches but open to members of all religious denominations:

TRINITY COLLEGE (Church of England). Warden, J. C. V. Behan, M.A., LL.B., B.C.L. Ox. Sub-Warden, R. L. Blackwood, M.A. Tas. and Melb.

ORMOND COLLEGE (Presbyterian). Master, D. K. Picken, M.A. Camb., Glas., and Melb.; Vice-Master, H. W. Allen, M.A.

QUEEN'S COLLEGE (Methodist). Master, Rev. E. H. Sugden, B.A., B.Sc. Lond., Litt.D.

NEWMAN COLLEGE (R.C.). Rector, V. Rev. A. Power, S.J., M.A.

COLLEGE LECTURERS (excluding those on Univ. staff). *Chem.*—Campbell, F. H., D.Sc.; Packer, J., B.Sc.; Wade, I., B.Sc. *Classics*—Vice-Master of Ormond; Lothian, Miss E. I., M.A.; Sub-Warden of Trin. *Engl.*—Master of Queen's; Webster, C. W. W., M.A., LL.M.; McKenzie, K. A., B.A. *Fr. and Ger.*—Wood, Mrs. E., B.A. *Hist.*—Clyne, T. S., M.A.; Stafford, C., LL.B.; Taylor, G., M.A. *Law*—Warden of Trin.; Foenander, O. de R., LL.M. *Logic and Philos.*—Fisher, A. G. B., B.A.; Lush, Miss K. A., M.A. *Maths. and Physics*—Master of Ormond; Weatherburn, C. E., D.Sc. Syd., M.A. Camb. and Melb.; Nelson, Miss E., M.Sc. *Med. and Surg.*—Lawton, F. D. H. B., O.B.E., M.B., B.S., L.R.C.P. Lond.; Newton, W. S., M.D.; Dew, H. R., M.B., B.S., F.R.C.S. Eng. *Theol.*—Albiston, A. E., M.A. *Engin.*—Howells, E.

II. AUSTRALIAN COLLEGE OF DENTISTRY. President, J. K. Clark, L.D.S., D.D.Sc. Superintendent, F. A. Aird, L.D.S., B.D.Sc. Other Lecturers (excluding those on Univ. staff): Finlay, G. (Op. D.); Greenwood, E. F., D.D.Sc. (Mat. Med.); Maclure, F., M.D., Ch.B.; Yule, E., L.D.S., B.D.Sc., D.D.S. (Or. Surg.); Lewis, J. M., D.D.Sc. (D. Surg., etc.); Nicholls, E. B., D.D.Sc. (D. Anat.); Pritchard, G. B., D.Sc. (Met.); Robertson, A. W. D., M.D., B.S. (Anat.); Tuckfield, W. J. (D. Mech. and Met.); Wilkinson, W. S., L.D.S., D.D.S. (Orth.); Sissons, A. T. (Chem.); Down, C. H., L.D.S., B.D.Sc. (Op. Tech.).

## GENERAL INFORMATION (v. also p. 367)

The Univ. was founded in 1853 by Act of the Victorian Legislature. In 1904 the annual grant of £9000 was increased by £11,000, enabling the Mining and Agric. Depts. to be developed. At the same time 3 Parliamentary Members were added to the Council of 20 elected by the Senate. In 1909 a further annual grant of £4200 was sanctioned for a Vet. School. In 1921 the invested Trust funds amounted to £247,700, Govt. grants £38,900, fees £71,600, and expenditure on salaries £79,900. The grounds, 104 acres, include four 10-acre College sites surrounding a recreation ground of 16 acres.

LIBRARY, including the Med. and Chem. Depts., 45,000 vols. MUSEUMS AND LABS., Anat., Biol., Engin., Geol., Path. (15,000 specimens), Vet. LABORATORIES, Agric., Bact. (investigations undertaken for Govt. Hospitals and Med. practrs.), Chem., Dent., Metall. and Mining (with 3 head stamp battery), Physics, Physiol. VET. RESEARCH INSTITUTE. Werribee RESEARCH FARM. HALL RESEARCH INSTITUTE in connexion with Melbourne Hospl.

FACULTIES. Arts, Sc., Law, Med., Dent., Vet. Sc., Engin. (including Archt., Metall., Mining), Agric. Conservatorium of Music (Director).

DEGREE COURSES: 3 yrs.—B.A. (ordy. and with Honrs.), B.Sc., Mus.Bac.; 4 yrs.—B.Sc. (Honrs.), LL.B., B.D.Sc., Lic.V.Sc., B.V.Sc., B.C.E., B.M.E., B.Met.E., B.E.E., B.Mech.E., B.Agric.Sc.; 5½ yrs.—M.B., B.S.

The first 2 years for the LL.B. may be those of the Arts course. The 2nd year of the B.Agr.Sc. course is passed at Werribee Research Farm.

HIGHER DEGREES. Open to Bachelors of 1 yr.'s standing—LL.M., M.V.Sc.; 2 yrs.—M.A., M.Sc., M.D., M.S., D.D.Sc., M.C.E., etc.; 3 yrs.—D.V.Sc.; 4 yrs.—D.Litt., D.Sc., LL.D.; 5 yrs.—D.Eng.; 6 yrs.—Mus.D. Courses of MEDICAL POST-GRADUATE STUDY arranged by special Committee on which Univ. is represented.

DIPLOMAS (which except Dip.Ed. can be taken without Matricn.): Educn., 3 yrs.' course which may include 2 yrs. of the course for any degree in the Univ.; Analyt. Chem., 9 mos. following Final Hons. in Chem.; D.P.H., open to Med. grads. of Melb. of 1 yr.'s standing and persons who have for 1 yr. been qualified for registration as Med. prctr. in U.K., 9 mos.; D.T.M., open to Aus. Med. practs. of 1 yr.'s standing, 3 mos.; Metall. or Mining, 3 yrs.; Archt., 4 yrs.; Agric., 3 yrs., of which the 3rd is spent at an Agric. Coll.

The Act of 1904 provided for the admission without fee of at least 80 students for 4 yrs.' courses in Mining and Agric. Each year 20 teachers of the Educn. Dept. are admitted without fee to the Diploma course, and special concessions in fees are made to all certif. teachers and students of Training Colls. who are candidates for the Dip.

SCHOLARSHIPS, ETC. Aggregate annual value about £8914. Among the more important are £100 in Pathology, £100 for Econ. Research, £100 (for 2 yrs.) in Geol. and in Vet. Anat., £100 in Anat., £100 for Scientific Research.

RESIDENCE. The Affiliated Colls. (v. *supra*) accommodate over 400 resident students.

ADULT EDUCATION. Tutorial classes are conducted in the city and suburbs and 6 country centres.

PUBLIC EXAMINATIONS. School Intermediate and School Leaving are held by the Univ. annually in Dec.; the Intermediate qualifies for entry into the State Public Service, the School Leaving certif. qualifies for matricn. The Univ. also arranges for the Inspection of Secondary Schools.

PUBLICATIONS. *Calendar*, 3s. net, includes list of publicns. by members of staff; *Univ. Mag.*; *Univ. Review*; *Speculum* (Med. Students' Journal); *Examn. Papers*, 1s.; *Students' Handbook*, 1s.; *Handbook of Pub. Examns.*, 2s. 6d.; *Conservatorium Prospectus*; *Manual of Pub. Examns. in Music*.

## THE YEAR 1921-22

BENEFACTIONS. Late Dr. W. Beattie Smith, £1000; appeal fund increased to £50,600.

RETIREMENTS AND RESIGNATIONS. J. R. Maguire; E. J. Nanson; Prof. D. O. Masson (Chem.), as from end of 1923 (to be succeeded by Dr. A. C. D. Rivett). DEATH: A. J. Higgin.

DEGREES CONFERRED. B.A. and B.Sc., 123; LL.B., 35; M.B. and B.S., 59; B.C.E., B.M.E., B.Met.E., B.E.E., and B.Mech.E., 17; Mus.Bac., 2; B.D.Sc., 12; B.Agr.Sc. and B.V.Sc., 4; Masterships, 51; Doctorates, 19.

NUMBER OF STUDENTS. Total (except Music), 2476, including women, 500; evening, 231; research, 4; full degree course, 2206.

ADULT EDUCATION. Tutorial class students, 540.

# UNIVERSITY OF QUEENSLAND, BRISBANE

CHANCELLOR—Rt. Hon. Lt.-Col. Sir MATTHEW NATHAN, G.C.M.G.,  
R.E., Governor of Queensland.

VICE-CHANCELLOR—Hon. A. J. THYNNE.

REGISTRAR AND LIBRARIAN—F. W. S. CUMBRAE-STEWART, D.C.L. Ox.,  
Barr.-at-Law.

## PROFESSORS, LECTURERS, ETC., September 28, 1922

### *Biology*

Goddard, E. J., B.A., D.Sc. Syd. Prof.  
Cayzer, A., B.Sc. Syd. Lectr.  
Walker, Mavis J., M.Sc. Adel.  
(Tempy.) Sr. Demr. &  
Asst. Lectr.

### *Chemistry*

Steele, B. D., D.Sc. Melb., F.I.C.,  
F.R.S. Prof.  
Bagster, L. S., B.Sc. Melb. (Ap-  
plied C.) Lectr.  
Jones, T. G. H., B.Sc. Syd., A.I.C.  
Lectr.  
Connor, E. A. O., M.Sc. Melb.  
Sr. Demr. & Asst. Lectr.

### *Classics*

Michie, J. L., M.A. Camb. Prof.  
Castlehow, S., M.A. Ox. Lectr.

### *Engineering*

Hawken, R. W. H., B.A., M.E.  
Syd., M.I.C.E. Prof.  
Boyd, A., D.Sc. Lond., B.E.,  
M.I.E.E., A.M.I.C.E.  
Lectr. (Mech. & El. E.).  
Sr. Demrs. & Asst. Lectrs. :  
Munro, A. R., A.M.I.C.E.,  
A.M.I.M.E.  
Ross, C. N., M.Sc., B.M.E. Melb.

### *English Language and Lit.*

Stable, J. J., M.A. Camb.  
McCaughy Prof.

### *English, French, and German*

Kirwood, A. E. M., M.A. Melb.  
(Tempy.) Lectr.  
Schindler, C., M.A. (Tempy.) Lectr.

### *Geology and Mineralogy*

Richards, H. C., D.Sc. Melb. Prof.  
Bryan, W. H., M.Sc. Lectr.

### *History and Economic Science*

Alcock, H., M.A. Ox. McCaughy Prof.  
Melbourne, A. C. V., B.A. Adel.  
Lectr. in Econ. and  
Colonial H.

### *Mathematics*

Priestley, H. J., M.A. Camb. Prof.  
Priest, H. J., B.A., B.Sc. Adel. Lectr.  
Swanwick, K. Ff., B.A., LL.B.  
Syd. Evening Lectr.

### *Medical Psychology*

Lowson, J. P., M.A., M.D. Edin.  
Research Prof.

### *Philosophy*

Mayo, G. E., B.A. Adel. Prof.  
Edwards, L. D., M.A. (Tempy.) Lectr.  
Flinn, Isabel M., M.A. Melb.  
(Tempy.) Lectr.

*Physics*

Parnell, T., M.A. Camb. Prof.  
 Lusby, S. G., M.A. Syd. Lectr.  
 Rimmer, T., M.Sc. Manc.  
 Sr. Demr. & Asst. Lectr.

*Correspondence Studies*

Jones, T. E., B.A. Syd. Director.  
 Darvall, Annie E., B.A.  
 (Tempy.) Asst.

## RECOGNIZED RESIDENTIAL COLLEGES

EMMANUEL (Presb.). Principal—R. Glaister, M.A., D.D.

St. JOHN'S (C. of E.). Warden—Rev. W. H. W. Stevenson, M.A. Syd.

KING'S (Methodist). Master—L. E. Bennett, M.A., B.D.

St. LEO'S (R.C.). Rector—Rev. E. Barry.

WOMEN'S (includes unmatriculated students). Principal—Freda Bage, M.Sc. Melb., F.L.S.

## GENERAL INFORMATION (v. also p. 367)

The Univ. was established by an Act of the local legislature in 1909. The entire management and control are in the hands of a Senate of 20 members, of whom 10 were appointed by the Government and 10 were elected by the Council (consisting of all members and past members of the Senate, graduates of the Univ. of 3 yrs.' standing, persons appointed by the Govt. as representatives of Commercial, Industrial, Scientific, etc., Assocns., benefactors, etc.). The annual grant from Govt. was £10,000 until 1917, when it was raised to £15,000. Under the will of the late Sir Samuel McCaughey, the Univ. receives an annual income of about £7500.

The grounds, facing the Brisbane River and adjoining the Botanical Gardens, include, in addition to the main building and recreation grounds, 6 departmental buildings and the Central Technical College.

LIBRARY, 23,000 vols. LABORATORIES: Biol., Chem., Applied Chem., Engin., Geol., Metall. and Assaying, Physics.

FACULTIES. Arts, Science, Engineering.

DEGREE COURSES. 3 yrs.—B.A., B.Sc.; 4 yrs.—B.Sc. (Applied) in Industrial Chem., B.E. in Civ., Mech. and Elec., or Mining Engin.

A *Diploma Course* in Mech. and Elec. Engin. (may be followed in any approved Coll. or Instn.), 4 yrs.; a Diploma course of at least 2 yrs. for persons who have had 3 yrs.' practical experience of Journalism.

HIGHER DEGREES. M.A. and M.Sc., open to B.A. and B.Sc. of 2 yrs.' standing, through examn. (M.A., examn. and thesis). M.E., open to B.E. of 3 yrs.' standing, 25 yrs. of age, engaged in professional work. D.Sc. open to M.Sc. of 5 yrs.' standing by examn. and thesis.

EVENING LECTURES AND EXTERNAL STUDENTS. Evening students may extend their course over 5 yrs. in Arts and Sc. No evening work in Engin. subjects is done, but by 5 yrs. of evening work elsewhere exemption from the first 2 yrs. of the B.E. course may be obtained.

Persons who having matriculated are unable to attend lectures at or in connexion with the Univ. may pursue certain courses under the guidance of

the Director of Correspondence studies. They may thereby, provided they pass the prescribed examns. (which may be held at local centres), qualify for a B.A. degree.

**ADULT MATRICULATION.**—Candidates who have attained the age of 25 yrs. may be admitted to matricn. in the Faculties of Arts and Science upon passing a special examn.

**SCHOLARSHIPS, ETC., FOR GRADUATES.** 2 gold medals offered by Govt. for distinction at graduation; £100 for 2 yrs. for Chem. Research; £200 for 1 yr. for Engin. work; £250 for study outside Australasia; £300 for 3 yrs. (W. and E. Hall Foundation), of which 2 to be spent abroad in Engin. Research; £500 for 2 yrs. in Econ. Biol.

**RESIDENCE.** Undergraduates are required to reside with their parents or approved friends or a tutor or in a recognized Residential Coll. or boarding-house licensed by the Senate. Fees in the Colleges, including residence, commons, and tuition, 20 gs. a term (Women's £20, St. Leo's £20).

**PUBLICATIONS.** *Calendar*, 2s. 6d.; *Manual of Pub. Examns.*, 1s.

## THE YEAR 1922

**NEW POSTS.** McCaughey Profs. in History and Economic Science, and in English Language and Literature.

**OTHER DEVELOPMENTS.** Bill for raising annual grant from £15,000 to £20,000 was presented to Parliament.

**DEGREES CONFERRED.** B.A., 31 (including 14 women); M.A., 2; B.Sc., 9 (women 3); B.Sc. App., 1; M.Sc., 1; B.E., 7; M.E., 1.

**NUMBER OF STUDENTS, Matriculated:** 117, including 39 women.

# UNIVERSITY OF SYDNEY

VISITOR—H.E. THE GOVERNOR.

CHANCELLOR—HON. SIR WILLIAM PORTUS CULLEN, K.C.M.G., M.A.,  
LL.D., Chief Justice of N.S.W.

VICE-CHANCELLOR—F. LEVERRIER, B.A., B.Sc., K.C.

WARDEN AND REGISTRAR—H. E. BARFF, C.M.G., M.A.

ASSISTANT REGISTRAR—W. A. SELLE, B.A.

LIBRARIAN—H. M. GREEN, B.A., LL.B.

STUDENT ADVISER AND APPOINTMENTS OFFICER—Brig.-Genl. I. G.  
MACKAY, C.M.G., B.A.

TUTOR TO WOMEN STUDENTS—ISABEL M. FIDLER, B.A.

## PROFESSORS, LECTURERS, ETC., November 1922

<i>Accountancy</i> , v. Com.	Silverton, R. J., M.B., Ch.M.
<i>Agriculture</i>	Demr.
Watt, R. D., M.A., B.Sc. Prof.	<i>Architecture</i>
Lectrs. :	Wilkinson, L., A.R.I.B.A. Prof.
Waterhouse, W. L., B.Sc.Agr.	Hook, A. S. (Constn.) Lectr.
(Agr. Bot.).	Carter, N. (Freehand Dr.) Instr.
Wright, G. (A. Chem.).	Moore, J. D. (Design) Lectr.
Maiden, J. H., F.R.S. (Forestry).	Berry, J. L. (Med. Arch.) Lectr.
Baker, R. T., F.L.S. (Forestry).	Harris, R. K., A.R.I.B.A. (Town
Wolstenholme, E. K., F.L.S. (Fruit	Planning) Lectr.
Culture).	1 Demr., 1 Studio Asst.
<i>Anatomy</i>	<i>Astronomy</i>
Maguire, F. A., M.B., Ch.M.,	Cooke, W. E., M.A. Prof.
F.R.C.S., D.S.O. Actg. Prof.	Furber, T. F. (Geodesy & A.) Lectr.
Hunter, J. I., M.B., Ch.M.	<i>Botany</i> , v. also Agric.
Assoc. Prof.	Lawson, A. A., D.Sc. Prof.
Demrs. :	Lectrs. & Demrs. :
Burkitt, A. N. St. G. H., M.B., B.Sc.	McLuckie, J., M.A. Glas., D.Sc.
Lectr. & Demr.	Brough, P., M.A., B.Sc., B.Sc.Agr.
Coen, B. J., M.B.	Glas.
Darling, H. C. R., M.B., M.S.	2 other Demrs.
Lond., F.R.C.S. Eng.	<i>Chemistry</i>
Storey, J. C., O.B.E., M.B., Ch.M.,	Fawsitt, C. E., D.Sc. Edin., Ph.D.
F.R.C.S.	Leip. Prof.
Teece, L. G., M.D., Ch.M.	Schofield, J. A., A.R.S.M., F.I.C.
Edye, B. T., M.B., Ch.M., F.R.C.S.	Assoc. Prof.
Fisher, E. M., M.B., Ch.M.	Lectrs. & Demrs. :
Wassell, C. E., D.S.O., M.B., Ch.M.	Brereton, E. Le G., B.Sc.
Darke, E. P., M.B., Ch.M.	Burrows, G. J., B.Sc.
Chapman, C. L., M.B., Ch.M.	6 other Demrs.

*Chem., Assaying and Metall.*  
 Eastaugh, F. A., A.R.S.M., F.I.C.  
 Asst. Prof.

*Chem., Organic, Pure and Applied*  
 Read, J., M.A. Camb., B.Sc. Lond.,  
 Ph.D. Zur. Prof.  
 Harker, G., D.Sc. Lond.  
 Lectr. & Demr.

Earl, N. C., B.Sc. Adel., Ph.D.  
 St. And. Lectr.  
 Hurst, E., B.Sc. Demr.

*Classics*  
 Woodhouse, W. J., M.A. Ox.  
 (Greek) Prof.  
 Todd, F. A., B.A., Ph.D. Jena  
 (Latin) Prof.  
 Powe, A. B., B.A. Q'ld (Latin)  
 Lectr.  
 Robinson, A. H., M.A. (Latin)  
 Lectr.

*Commerce, v. also Econ.*  
 Carter, G. P., A.C.A., A.C.P.A.  
 (Acctcy.) Lectr.  
 Allard, G. M. (Banking) Lectr.  
 Braddon, Sir Henry, K.B.E.,  
 M.L.C. (Business) Lectr.  
 Cleary, W. J., B.Ec. (Business)  
 Lectr.  
 Stacy, B. V., C.M.G., D.S.O., B.A.,  
 LL.B. (Com. & Indust. Law)  
 Lectr.

*Dentistry*  
 Reading, R. F., M.R.C.S., L.R.C.P.,  
 L.D.S. Eng. Prof.  
 Deck, E., D.D.S. (Mech. D.) Lectr.  
 Marshall, F., D.D.S. (Mech. D.)  
 Lectr.  
 Gates, E. C., D.D.S. (Clin. D.)  
 Lectr.  
 Ash, P. A., D.D.S. (Surg. D.) Lectr.  
 Smith, Donald (Surg. D.) Lectr.  
 Charlton, P. C., L.D.S., D.M.D.  
 (Dental Mat. Med.) Lectr.  
 Palmer, A. B. A. Demr.  
 Frizelle, A. A. Demr.

*Economics*  
 Mills, R. C., LL.M. Melb., D.Sc.  
 Econ. Lond. Dean and Prof.

Portus, G. V., B.Litt. Ox., M.A.  
 (E. Hist.) Lectr.  
 Bland, F. A. M.A., LL.B. (Pub.  
 Admn.) Lectr.  
 Watts, P. R., B.A., LL.B. (Pub.  
 Admn.) Lectr.  
 Guthrie, F. B., F.I.C. (Tech. of  
 Com. Products) Lectr.  
 Hodgson, C. A., M.A. (Transport)  
 Lectr.  
 Sawkins, D. T., B.A. Camb., M.A.  
 (Statistics) Lectr.

*Education*  
 Mackie, A., M.A. Prof.  
 Cole, P. R., M.A., Ph.D. Col. Lectr.  
 Roberts, T. T., M.A. Lectr.  
 Cameron, R. G., M.A. Lectr.  
 Phillips, G., M.A., D.Sc. (Exper.  
 E.) Lectr.

*Engineering, v. infra*  
*English Language*  
 Holme, E. R., O.B.E., M.A. Prof.

*English Literature*  
 MacCallum, M. W., M.A., LL.D.  
 Glas. Hon. Prof.  
 Le Gay Brereton, J., B.A. Prof.  
 Waldock, A. J. A., B.A. Lectr.

*Forestry, v. Agric.*  
*French*  
 Nicholson, G. G., C.B.E., B.C.L.  
 Ox., M.A. Prof.  
 Marks, Gladys, B.A. Lectr.  
 Andraud, R. A. F., L. ès L. Lectr.

*Geodesy, v. Astron.*  
*Geography* [Assoc. Prof.]  
 Taylor, T. G., D.Sc., B.E.

*Geology and Phys. Geog.*  
 David, Sir T. W. E., K.B.E.,  
 C.M.G., B.A., D.Sc. Ox.,  
 F.R.S. Prof. & Hovell Lectr.  
 Cotton, L. A., M.A., D.Sc.  
 Asst. Prof.  
 Browne, W. R., D.Sc.  
 Lectr. & Demr.

Waterhouse, L. L., B.E.  
 Lectr. & Demr.  
 Powell, Dorothy E., B.Sc. Demr.

Osborne, G. D., B.Sc. Demr.  
Brown, Ida A., B.Sc. Demr.  
Dun, W. S. (Palæont.) Lectr.

*German and Comparative Lit.*  
Brennan, C. J., M.A. Assoc. Prof.

*History*, v. also Econ.  
Wood, G. A., M.A. Ox.  
Challis Prof.  
Bruce, J. F., B.A. Ox., M.A. Lectr.

*Law*, v. *infra*

*Mathematics, Pure and Applied*  
Carslaw, H. S., M.A., Sc.D. Camb.,  
D.Sc. Glas. Prof.  
Lyons, R. J., B.A. Camb. Lectr.  
Wellish, E. M., B.A. Camb., M.A.  
(Appl. M.) Lectr.  
Thorne, H. H., M.A. Camb., B.Sc.  
Lectr.

*Medicine*, v. *infra*

*Metallurgy*, v. also Chem.  
Turner, B. W., A.R.S.M.  
Russell Lectr.

*Mining*

Power, F. D., F.G.S. Russell Lectr.

*Oriental Studies*

Sadler, A. L., M.A. Ox. Prof.  
Okada, R. (Japanese) Reader  
Thatcher, G. W., M.A., B.D.  
(O. Hist.) Lectr.

*Philosophy* [Challis Prof.  
Muscio, B., M.A. Syd. and Camb.

*Physics*

..... Prof.  
Vonwiller, O. U., B.Sc. Assoc. Prof.

Lectrs. & Demrs. :  
Mackay, I. G., C.M.G., B.A.  
Booth, E. H., B.Sc.  
Briggs, G. H., B.Sc.  
Esserman, N. A., B.Sc.  
Price, W. L., B.Sc., B.E.  
3 other Demrs.

*Physiology* [Prof.  
Chapman, H. G., M.D., B.S. Melb.

Priestley, H., M.D., Ch.M., B.Sc.  
Assoc. Prof.

Lectrs. & Demrs. :

Cotton, F. S., B.Sc.  
McQuiggin, H. G., B.Sc.  
Wardlaw, H. S. H., D.Sc.  
Hindmarsh, Ellen M., B.Sc.  
Demrs. :  
Dixon, J. R., M.R.C.S.  
Ingram, W. W., M.D., B.Ch.  
Beveridge, Lorna D., M.B., Ch.M.,  
B.Sc.

Kincaid, Hilda, M.B., B.S., D.Sc.  
Moreau, S. J. H., M.B., Ch.M.  
Hamilton, Ellice E. P., B.A., B.Sc.

*Preventive Medicine*

Sutton, Harvey, M.D., Ch.B.,  
D.P.H. Melb., B.Sc. Ox.

Lectr.

*Psychology*

[Assoc. Prof.  
Lovell, H. T., M.A., Ph.D. Jena  
Martin, A. H., M.A., Ph.D. Col.

Lectr.

*Surveying*

[Russell Lectr.  
Craig, A. D., B.A., B.E.  
3 Demrs.

*Veterinary Science*, v. also Zool.

Stewart, J. D., M.R.C.V.S.,  
B.V.Sc. Prof.

Dodd, S., F.R.C.V.S., D.V.Sc.  
Melb. (Path., etc.) Lectr.

Gunn, R. M. C., B.Sc. (Agr.),  
Birm. & Syd., M.R.C.V.Sc.

(Surg. & Anat.) Lectr.

Henry, M., B.V.Sc. (State Vet.  
San. Sc.) Lectr.

Whitehouse, F., B.V.Sc. (Vet.  
Mat. Med.) Lectr.

*Zoology*, v. also Agric.

..... Challis Prof.  
Harrison, L., B.A. Camb., B.Sc.

(Lectr. in Vet. Parasit.)

Lectr. & Demr.  
Briggs, E. A., B.Sc. Lectr. & Demr.

Chase, Eleanor E., B.Sc.

Lectr. & Demr.

Thomas, Ethel M., B.Sc. Demr.  
Nicholson, A. J., M.Sc. Manc.

(Entom.) Lectr.



**Engineering, v. also Mining**  
 Warren, W. H., M.I.C.E., LL.D.  
 Challis Prof.

Lectrs. & Demrs. :  
 Miller, W. A., B.Sc., M.E. (Civ.E.).  
 Chapman, R. H., M.E. Adel.  
 Debenham, A. J., B.E. Lectr.  
 Larkins, H. M., B.E. Lectr.  
 Carleton, G. B., M.E. Lectr.  
 Vicars, J., M.E. Lectr.  
 2 Demrs.

**Electrical E.**  
 Madsen, J. P. V., B.E., D.Sc.  
 Adel. Russell Prof.

Lectrs. & Demrs. :  
 Sharp, L. H., B.Sc., B.E.  
 Campbell, E. F., B.E.

**Mechanical E.**  
 Barraclough, Sir S. H. E., K.B.E.,  
 M.M.E. Corn., B.E., M.I.M.E.,  
 M.I.C.E. Russell Prof.

Lectrs. & Demrs. :  
 Swain, H. J., B.A., B.Sc., B.E.  
 Sutherland, G. F., A.R.C.S.  
 Gibson, W. H. H., B.Sc., B.E.  
 Hebblewhite, W. R., B.E.

**Law, v. also Com.**  
 Peden, The Hon. J. B., M.L.C.,  
 B.A., LL.B. Challis Prof.  
**International Law & Jurispr.**  
 Charteris, A. H., M.A., LL.B.  
 Edin. Challis Prof.

**Contracts, Merc. Law, Torts**  
 Street, K. W., B.A., LL.B.  
 Challis Lectr.

**Equity and Company Law**  
 Hooton, J. R., B.A. Ox. and Syd.  
 Challis Lectr.

**Bankruptcy and Probate**  
 McDonald, E. F., LL.B.  
 Challis Lectr.

**Divorce**  
 Davidson, C. G., B.A., LL.B.  
 Challis Lectr.

**Procedure, Pleading, & Evidence**  
 Edwards, D. S., B.A., LL.B.  
 Challis Lectr.

**Interpretation**  
 ..... Challis Lectr.

**Roman Law** [Challis Lectr.  
 MacCallum, M. L., M.A., B.C.L. Ox.

**Conveyancing**  
 Watts, P. R., B.A., LL.B. Reader.

**Medicine (for Preventive M. and  
 Anat., Chem., etc., v. *supra*)**

**Anæsthetics**  
 Lidwill, M. C., M.D. Tutor.  
 Dunlop, L. W., M.B., Ch.M. Tutor.

**Diseases of Ear, Nose, Throat**  
 Marks, H. J., M.A., M.D. Lectr.

**Diseases of the Skin** [Lectr.  
 Molesworth, E. H., M.B., Ch.M.

**Ethics of Med. Pract.** [Lectr.  
 Todd, R. H., B.A., M.D., Ch.B.

**Gynæcology**  
 Barrington, F., M.B., Ch.M. Edin.,  
 F.R.C.S. Eng. Lectr.

**Infectious Diseases** [Hon. Tutor.  
 Millard, R. J., M.B., Ch.M.

**Materia Med.**  
 Macpherson, J., M.A., M.B.,  
 Ch.M., B.Sc. Lectr.

Stroud, S. H., F.I.C.  
 Lectr. & Demr. in Pharmacy.  
 Murphy, T. W., B.Sc.  
 Demr. in Pharmacy.

**Medical Jurispr.** [Lectr.  
 Todd, R. H., B.A., M.D., Ch.B.

**Med., Principles, etc.**  
 Mills, A. E., M.B., Ch.M. Prof.

**Medicine, Clinical** [Lectr.  
 Rennie, G. E., B.A., M.D., F.R.C.P.  
 Gillies, S., M.A., M.D. Lectr.  
 Blackburn, C. B., O.B.E., M.D.,  
 Ch.M. Lectr.  
 Gill, J. M., M.D., L.R.C.P.,  
 M.R.C.S. Lectr.

**Med. Tutors**  
 Smith, S. A., M.B., Ch.M.  
 Ritchie, H. J., M.B., Ch.M.  
 Clayton, H. J., M.B., Ch.M.

Holmes à Court, A. W., M.D., Ch.M.	<i>Surgery, Principles, etc.</i> [Prof. Sandes, F. P., M.D., Ch.M., B.Sc.
<i>Obstetrics</i> [Lectr.	<i>Surg., Clinical</i>
Windeyer, J. C., M.B., Ch.M.	MacLaurin, C., M.B., Ch.M., LL.D.
Craig, F. B., M.B., Ch.M. Tutor.	Padua Lectr.
Furber, R. I., M.B., Ch.M. Tutor.	Abbott, G. H., B.A., M.B., Ch.M. Lectr.
Gibson, A. J., M.B., Ch.M. Tutor.	Craig, R. G., M.B., Ch.M. Lectr.
<i>Ophthalmology</i>	Maitland, Sir Herbert L., M.B., Ch.M. Lectr.
Waddy, R. G., M.B., Ch.M. Lectr.	
<i>Pathology</i>	<i>Surg. Tutors</i>
Welsh, D. A., M.A., B.Sc., M.D., F.R.C.P. Edin. Prof.	McKelvey, J. L., M.B., Ch.M.
Inglis, W. K., M.D., Ch.M. Lectr. & Chief Demr.	Aspinall, A. J., M.B., Ch.M.
Little, E. Marjory, M.B. Demr.	University Extension
Edye, B. T. (v. Anat.) Demr.	Mackay, I. G., C.M.G., D.S.O., B.A. Secy. to the Board.
Hon. Demrs. :	Portus, G. V. (v. <i>supra</i> , Econ.) Dir. of Tutorial Classes.
Walker, A. S., M.D., Ch.M.	Bland, F. A. (v. <i>supra</i> , Econ.) Asst. Director.
Hughes, L. H., M.D., Ch.M.	
Latham, O., M.B., Ch.M.	2 full-time tutors and 34 tutorial class lectrs.
<i>Psychiatry</i>	
Macpherson, Sir J., K.B.E., C.B., M.D., F.R.C.P. Edin. Prof.	

## COLLEGES WITHIN THE UNIVERSITY

ST. PAUL'S COLLEGE (Anglican). Warden—Rev. A. H. Garnsey, M.A.,  
Lectr. in *Div. and Classics*. Sub-Warden—K. B. Voss, B.E. Lectr. in *Med.*  
—H. J. Clayton, M.B., Ch.M. *Philos.*—R. S. Lee, B.A. *Science*—F. H. H.  
Wilson, B.Sc.

ST. JOHN'S COLLEGE (R.C.). Rector—Very Rev. M. J. O'Reilly, Lectr. in  
*Christian Apologetics*. Vice-Rector—Rev. J. J. Ryan. Other Lectrs. :  
*Med.*—H. M. Moran, M.B., Ch.M. *Scholastic Philos.*—Rev. P. Dalton.

ST. ANDREW'S COLLEGE (Presb.). Principal—E. E. Anderson, M.A. Aberd.  
Vice-Principal—A. L. Campbell, B.A., B.E. Secretary—S. J. Carruthers.  
Hunter-Baillie Profs. : *Oriental and Polynesian Langs.*—A. Harper, M.A., D.D.  
*Engl. Lang. and Lit.*—R. G. Macintyre, M.A., B.D. Lectrs. : *Law*—R. I. Kay,  
B.A., LL.B. *Maths.*—K. B. Fraser, M.B., Ch.M. *Med.*—E. M. Fisher, M.B.,  
Ch.M. *Science*—G. H. Clarke, B.Sc. (*Biol.*) ; J. G. Stephens, B.Sc. (*Phys. and*  
*Chem.*). *Classics and Philos.*—The Principal. *Engin.*—G. A. Stuckey, B.E.

WESLEY COLLEGE (Methodist). Master—M. Scott Fletcher, M.A. Syd.,  
B.Litt. Ox. Tutors : *Philos. and Class.*—The Master ; *Physics*—L. A.  
Basser, B.Sc. 4 Tutors in *Med.*

THE WOMEN'S COLLEGE. Principal—Miss S. J. Williams, M.A. Melb. and  
Syd. Vice-Principal—Miss M. K. Brown.

## GENERAL INFORMATION (v. also p. 367)

Founded by Act of the N.S.W. Legislature in 1850, the Univ. was granted  
a Royal Charter in 1858. Its development has been largely due to private

benefactions, notably those of J. H. Challis—£250,000—in 1880, T. Fisher—£30,000 for Library—in 1885, and P. N. Russell—£100,000 for School of Engineering, etc.—in 1896 and 1904. Under the will of Sir S. McCaughey it will receive £15,000 p.a. In 1912 the Statutory endowment was raised from £10,000 to £20,000 with provision for further automatic increases, and at the same time the constitution of the governing body, called the Senate, was altered so as to include 6 nominees of the Govr. and Parliament (one-fourth of the whole number). In 1917-18 the Statutory endowment was further increased by £32,000, including £2000 for the new School of Archit. Private Foundations balances amounted in 1921 to £622,376, Govt. grants to £77,712, fees £37,766, expenditure on salaries £116,500, including £9505 from the Challis Fund, and £12,182 from the McCaughey Fund. The grounds, which include the sites of the Colleges grouped round an oval, cover 140 acres.

Provision was made by Act of Parliament soon after the foundation of the Univ. for endowing such Colleges as might be established within it, to the extent of £20,000 in aid of building and £500 p.a. towards the Principal's salary.

The LIBRARY, 130,000 vols., receives over 750 serial publications. MUSEUMS: Nicholson collection of Egyp., Greek, Roman, and Medieval Antiq. (4000 specimens); Macleay Nat. Hist.; Anat., Geol., and Zool. LABORATORIES: Schools of Med., Engin., and Archit. (atelier, Bot., Chem. (including Metall. and Research), Geol. (with rock analysis Research), Phys., Zool. The ROYAL PRINCE ALFRED HOSPL., erected on the Univ. grounds as a general hospl. and school, has 518 beds. Gladesville mental hospl. recognized by Camb. for clinical work for Dip. Psych. Med.

FACULTIES. Arts, Law, Med., Science, Engin., Dent., Vet. Sc., Agric., Econ., Archit.

DEGREE COURSES: 3 yrs.—B.A., B.Sc.; 4 yrs.—B.Sc. in Agric. (3 for diplomate of recog. Agric. Coll.), B.Ec., LL.B. (after completing 1st yr. in Arts or passing Law Entrance Examn.), B.D.S., B.V.Sc., B.E. (in Civ., Mining and Metall., or Mech. and Elec.); 5 yrs.—B.Arch.; 5½ yrs.—M.B., B.S.; 2 yrs.' advanced study or research (after full 3 yrs.' course at another Univ.)—B.A. or B.Sc. The LL.B. qualifies conditionally for admission to the bar. Law students usually take the B.A. first, selecting Law subjects in 3rd yr., and complete combined course in 5 or 6 yrs., thereby gaining concessions in regard to periods of studentship and service as articled clerk. HIGHER DEGREES. Obtainable by bachelors of 2 yrs.' standing—M.A., M.Ec., LL.D., M.D., M.S.; 3 yrs.—D.Sc., M.E. DIPLOMAS. Educn. (for graduates in Arts or Sc.), 1 yr.'s course; Econ. and Comm., 3 yrs.; D.P.H.; D.T.M. Candidates for the Diploma of the Pharmacy Board have to attend courses in the Univ.

RECOGNITION OF STUDIES ELSEWHERE. A considerable portion (in Med. 3 yrs.) of the curriculum for a Degree must be taken in Syd.

SCHOLARSHIPS, ETC., FOR GRADUATES. Junior Demrs. are appointed annually in each Scientific Dept. with the obligation to carry out research under the direction of the Prof.; 6 post-grad. Scholarships of £150 each and 2 of £300 are awarded annually for scientific study and research in the Univ.; 4 Macleay Fellowships of £400 p.a. each are tenable by B.Sc.'s; 4 others of £300 p.a., and 2 Scholps. of £250 p.a., tenable for 2 yrs., are awarded annually for further study and research at Syd. or abroad.

RESIDENCE. The four denominational Colls. (v. *supra*) provide accommodation for 180 students; the Women's Coll. for 28.

UNIVERSITY EXTENSION LECTURES are given in courses of from 3 upwards in Sydney and numerous local centres. *Tutorial Classes* are provided, as prescribed by the Act of 1912, under the superintendence of a Joint Committee of the Univ. and Workers' Educl. Assocn. of N.S.W. In 1921 the Govt. grant for this purpose was £6370; 56 classes were at work, including 1640 effective students.

ADULT MATRICULATION. Persons of distinct educational merit who have attained the age of 25 yrs. may be admitted as matriculated students in the Faculties of Arts, Science, and Econ.

PUBLICATIONS. *Calendar* pubd. in June, 3s. 6d., with annual report and list of pubns. of Univ. Staff; Reprints of Scientific Papers by members of the Staff; *Hermes*, an undergrads.' mag.

## THE YEAR 1921-22

BENEFACTIONS. Mrs. Badham, books of late Prof. Badham; aeroplane engines, British and foreign, from Imperial Govt.; 20,000 tons of building stone from Dept. of Technical Educn.; Miss Rose Scott, £50 for prize for women in Law; D. Forbes MacKay, £100 for Sports Union; Lt.-Col. Campbell, £2000 for poor students; Louise Bancroft bequest, £1000 for prize for Med. research; Sir Josiah Symon, £1000 for scholp. in English; Sir Hugh Dixon, £1000 to enable Prof. David to take 2 years' leave in order to write a book on Geology of Australia. The French Govt. agreed to contribute 8000 francs p.a. towards 2 Travelling Scholps.

NEW BUILDINGS. Additions to north wing of Med. School completed at cost of £12,500; Dept. of Geology remodelled to provide additional laboratory space; University atelier in Faculty of Architecture.

NEW POSTS. Lect'ship in French (Frenchman); Student Adviser and Apptmts. Officer; Asst. Registrar; Tutorships in Obst. OTHER DEVELOPMENTS. Regns. for Matricn. requiring every candidate to pass in English and another language subject at higher standard; Archit. course extended from 4 to 5 yrs.; invitation on behalf of Australian Univs. to Prof. McKail to visit Australia.

NUMBER OF STUDENTS, 2965, including 706 women. Attending Degree and diploma courses in Arts, 637 (women, 324), including 145 evening students; Law, 298 (w., 11); Med., 870 (w., 98); Science, 232 (w., 114); Engin., 190; Dent., 79 (w., 4); Vet. Sc., 24; Agric., 29 (w., 4); Econ., 198 (w., 40); Archit., 46 (w., 21); Pharmacy, 197 (w., 26); Massage, 14 (w., 10); others, 191. ADULT EDUCATION. 58 tutorial classes (mostly 3-yr.), with about 1600 students.

DEGREES CONFERRED (1921). Total, 459; M.A., 14; B.A., 130; B.Ec., 17; LL.B., 21; M.D., 2; M.B., 88; Ch.M., 99; B.D.S., 5; D.Sc., 1; B.Sc., 39; B.E., 37; B.V.Sc., 1; B.Sc.(Agr.), 5.

RETIREMENTS AND RESIGNATIONS. Profs. F. Anderson (Prof. Emer.), S. J. Johnston, and R. F. Irvine. E. M. Moors, H. G. Jefferson, J. F. Hennessy, A. Coffey, F. R. Jordan, M. Miyata, J. H. Hammond, J. E. V. Barling, F. A. Pockley, A. Davidson, A. L. Lyell, I. Clunies-Ross, C. J. M. Walters, W. W. Froggatt, S. T. D. Symons, J. I. C. Cosh, H. H. Marshall. DEATHS. J. A. Pollock, J. Murdoch.

# UNIVERSITY OF TASMANIA, HOBART

VISITOR—H.E. THE GOVERNOR.

CHANCELLOR—HON. TETLEY GANT, C.M.G., M.A.

VICE-CHANCELLOR—W. J. T. STOPS, LL.B.

REGISTRAR—Lt.-Col. L. R. THOMAS.

LIBRARIAN—E. MORRIS MILLER, M.A., Litt.D.

## PROFESSORS, LECTURERS, ETC., March 1922

<i>Accountancy and Auditing</i>	<i>History</i> , v. also Econ.
Cummins, H. H., F.I.C.A. Lectr.	King, C. S., M.A. Ox., B.A. Lectr.
<i>Biology</i> [Ralston Prof.]	<i>Law</i>
Flynn, T. T., D.Sc. Syd.	McDougall, D. G., M.A., B.C.L.
<i>Chemistry</i>	Ox., M.A., LL.D. Melb. Prof.
MacLeod, P. J., B.A. Lectr.	Griffiths, P. L., M.A. Melb., LL.B.
<i>Classics and English Lit.</i> [Prof.]	Lectr.
Williams, W. H., M.A. Camb.	<i>Mathematics</i> , v. also Engin.
Dunbabin, R. L., M.A. Ox.	McAulay, A., B.A. Camb., M.A.
(Classics) Prof.	Melb. Prof.
<i>Economics</i>	<i>Modern Languages</i>
Copland, D. B., M.A. N.Z. Prof.	Raamsdonk, I. N., Litt.B., LL.B.
Judd, W., M.A. Melb. (Hist. and	Amst. Lectr.
E.) Lectr.	<i>Psychology and Philosophy</i>
Brigden, J. B., B.A. Ox. (Hist. and	Miller, E. Morris, M.A., Litt.D.
E.) Lectr.	Melb. Lectr.
<i>Education</i>	<i>Physics</i>
Johnston, J. A., M.A. N.Z. Lectr.	McAulay, A. L., B.A. Camb.,
<i>Engineering</i>	Ph.D. Manc., B.Sc. Lectr.
Burn, A., B.E. Syd., M.Sc. Prof.	
Canning, R. W., A.M.I.C.E.,	
A.C.G.I. Lond.	
Lectr. in Elec. E. and	<b>Tutorial Class Lectrs.</b>
in Maths.	Prof. Copland (Director) and the
	Lectrs. in Economics.

## AFFILIATED SCHOOLS

ZEEHAN SCHOOL OF MINES AND METALLURGY.

Mt. LYELL SCHOOL OF MINES AND INDUSTRIES.

## GENERAL INFORMATION (v. also p. 367)

Founded in 1890 under an Act of the Tasmanian Legislature, the Univ. was, in 1915, granted a Royal Charter. To the original Faculties—Arts, Science, and Law—Commerce was added in 1919 and Engineering in 1922. The annual Govt. grant is £19,500.

ADMISSION OF PERSONS OF MATURE AGE. Persons not below 25 yrs. of age who satisfy Board of Studies that they possess sufficient qualifications for the courses they propose to pursue may be exempted from the ordinary requirements for matricn.

LIBRARY, 14,000 vols. LABORATORIES: Chem., Phys., Biol.; Testing plant in Engin. Dept. Facilities for investigation in Elec. Engin. OBSERVATORY, 8" reflector telescope.

DEGREE COURSES: 3 yrs., B.A., B.Sc., LL.B. (after 1 yr. of Arts course); 4 yrs., B.Com., B.Eng. HIGHER DEGREES. Open to Bachelors of 2 yrs.' standing, M.A., M.Sc., LL.M., M.Com.; 3 yrs.' D.Sc.; to Masters of 3 yrs.' standing, LL.D. DIPLOMAS of the Affiliated Schools: Metal Mining; Metall., Chem., and Assaying. CERTIFICATE of Commerce, 2 yrs.' course.

UNIVERSITY EXTENSION. Tutorial classes, annual grant, £1125.

STEAMER PASSAGE concession by Orient Line similar to those described on p. 396.

PUBLIC EXAMINATIONS. Intermediate and Leaving (minimum ages 14 and 16); Music (held in conjunction with other Australian Univs.).

PUBLICATIONS. *Calendar* (Aug.), 2s.; *Pub. Examn. Manuals*, 2s.; *Degree Examn. Papers*, 1s. Univ. news appears in *Hobart Mercury* and *World*. Students' Magazine, *Platypus*.

## THE YEAR 1921-22

NEW DEVELOPMENTS. Faculty of Engineering established. Provision for exempting persons of mature age from ordinary requirements for matricn.

DEGREES CONFERRED (1921). B.A., 7; B.Sc., 6; LL.B., 2; M.A., 2.

NUMBER OF STUDENTS. Preparing for Bachelor's degree 200, including 70 women; for Master's degree 4. W.E.A. students 487.

# UNIVERSITY OF WESTERN AUSTRALIA, PERTH

VISITOR—H.E. THE GOVERNOR.

CHANCELLOR—Hon. A. J. H. SAW, M.L.C., M.A., M.D.

PRO-CHANCELLOR—CECIL ANDREWS, M.A.

VICE-CHANCELLOR—Prof. E. O. G. Shann, B.A.

WARDEN OF CONVOCATION—J. S. BATTYE, B.A., LL.B., D.Litt.

REGISTRAR—.....

## PROFESSORS AND LECTURERS, August 25, 1922

### *Agriculture*

Paterson, J. W., B.Sc. Edin.,  
Ph.D. Leip. Prof.

### *Biology*

Nicholls, G. E., D.Sc. Lond.,  
A.R.C.Sc. Prof.  
Reid, E. R. L., B.Sc. Adel. Asst.

### *Chemistry*

Wilsmore, N. T. M., D.Sc. Melb.,  
F.I.C. Prof.  
Tattersall, G., M.Sc. Manc., F.I.C.  
Asst. Prof.

### *Classics*

Wood, G., M.A. Aberd. Assoc. Prof.

### *Education*

Rooney, W. J., B.A. Syd.  
Assoc. Lectr.

### *English*

Murdoch, W. L. F., M.A. Melb.  
Bald, R. C., B.A. Melb. Asst.

### *French and German*

Irving, G. T., M.A. Edin. Lectr.  
D'Ery, Liliane Asst.  
Graebner, R. M. Lectr.

### *Geology*

Clarke, E. de C., M.A. N.Z. Lectr.

### *History and Economics*

Shann, E. O. G., B.A. Melb. Prof.  
Whitfeld, L. O'G., B.A. Ox. Asst.

### *Mathematics and Physics*

Ross, A. D., M.A., D.Sc. Glas.  
F.R.S.E., F.R.A.S. Prof.  
Thompson, R. D., M.A. N.Z.,  
M.Sc. Lectr.  
Moir, Margt. B., M.A., D.Sc. Glas.  
Lectr.  
Orton, A. A., B.A., B.Sc. Asst.

### *Mining and Engineering*

Whitfeld, H. E., B.A., B.E.  
Syd., M.I.M.M. Prof.  
Tomlinson, A., M.Sc. Manc.,  
A.M.I.C.E. Asst. Prof.  
Fraenkel, P. H., B.E.E. Melb.,  
A.M.I.E.E. Lectr.

### *Philosophy*

Fox, A. C., B.A. Syd. Lectr.

### *Surveying*

Nunn, G. M., L.S. Assoc. Lectr.

### *Veterinary Science*

Le Soeuf, E. A., B.V.Sc. Melb.  
Assoc. Lectr.

## AFFILIATED SCHOOLS

PERTH TECHNICAL SCHOOL, and SCHOOL OF MINES, KALGOORLIE.

## GENERAL INFORMATION (v. also p. 367)

Established by Act of the State Legislature in 1911, the Univ. opened its first session in 1913. It has a large endowment of land granted by Govt., including a site of 100 acres for buildings, and receives an annual grant of £16,800. The administration is vested in a Senate of 18 persons, of whom 6 are nominated by Govt.

LABORATORIES. Agric., Biol., Chem., Geol., Engin., Phys.

FACULTIES. Arts, Sc. (including Agric.), Engin.

DEGREE COURSES: 3 yrs.—B.A., B.Sc.; 4 yrs.—B.A. (Hons.) and B.Sc. (Hons.); 5 yrs.—B.E. (a sandwich system during last 3 yrs.). First year Med. course in Fac. of Sc.

EVENING CLASSES are held in the Arts Faculty only, but certain Science classes may be taken in the evenings at affiliated Colleges.

HIGHER DEGREES. M.A., M.Sc., M.E., D.Litt., D.Sc.

DIPLOMA<sup>s</sup>. Agric. and (Associateship) Engin.

PUBLIC EXAMINATIONS. School Certifs. (Junr. and Leaving) and Music.

ADULT MATRICULATION. Persons who have attained the age of 25 yrs. may be admitted without examn. as matriculated students if the Faculty is satisfied that they possess sufficient educational qualifications.

PUBLICATIONS. *Calendar* (Dec.), 2s. 6d.; *Public Examn. Manuals*; *Black Swan* (Students' Magazine).

## THE YEAR 1922

BENEFACTIONS. Endowment of several scholarships in Pure Science and Agr. Science.

GOVERNMENT GRANT. At the close of 1921 a statute was drafted by the Univ. Senate and approved by Convocation to impose tuition fees. The Legislative Assembly vetoed the statute. Since then the Govt. grant has been raised from £15,000 to £16,800 p.a.

DEGREES GRANTED. B.A., 29; B.Sc., 13; B.Sc.Eng., 8; B.E., 4; M.Sc., 1; B.Sc.Agric., 2; Hon. LL.D., 1; Hon. D.Sc., 1.

NUMBER OF STUDENTS. In Arts—Ordinary, 201 (including 109 women); post-grad., 22 (11 women). Science—77 (15 women); post-grad., 2. Engineering—24. Special courses—55.

RETIREMENTS. Miss E. Derham, W. K. Hancock, H. S. Thompson.



# UNIVERSITY OF NEW ZEALAND

VISITOR—H.E. THE GOVERNOR-GENERAL.

CHANCELLOR—Rt. Hon. Sir ROBERT STOUT, K.C.M.G., LL.D. Manc. and Edin., D.C.L. Ox.

VICE-CHANCELLOR—J. MACMILLAN BROWN, M.A., LL.D. Glas.

CHAIRMAN, BOARD OF STUDIES—Prof. H. W. SEGAR, M.A. Camb., Auckland.

REGISTRAR—E. T. NORRIS, M.A., Wellington.

AGENT IN ENGLAND—J. W. JOYNT, M.A. Dub., 88 Gower Street, London, W.C.1.

## AFFILIATED INSTITUTIONS

UNIVERSITY OF OTAGO, DUNEDIN ; CANTERBURY COLLEGE, CHRISTCHURCH ; AUCKLAND UNIVERSITY COLLEGE ; VICTORIA UNIV. COLLEGE, WELLINGTON.

This University, an examining body, was founded in 1870. Its constitution, defined by the N.Z. Univ. Act 1908 as amended in 1912, 1914, and 1915, vests the Government of the Univ. in a Senate of 24 members (Fellows), assisted, as regards schemes of study, etc., by a Board of Studies representing the College Professorial Boards. Of the Fellows, 4 are nominated by the Governor, and 20 elected, 8 by the College Governing Bodies, 4 by their teaching staffs, and 8 by graduates. The Chancellor and Vice-Chancellor are elected by the Senate; the former (or, in his absence, the latter) presides at meetings of the Senate. There are no University buildings: the offices are at Wellington. An annual grant of £4000 is received from Govt.

**MATRICULATION.** Candidates must pass in 5 subjects, including English, Maths., and one language. A candidate who does not pass in Latin or Greek must pass in Physical or Natural or Home Science. Not more than one of these sciences can be taken; in the syllabus prominence is given to their practical aspect. The examn. is held in Dec. Special provision is made for exemption of persons not under 30 years of age and students from other Univs.

**TERMS.** A student presenting himself for a Univ. examn. for which the keeping of terms is required must have passed the College examn. in the subjects he offers at the corresponding stage. The terms are: Autumn (March-May), Winter (June-Aug.), and Spring (Sept.-Oct. or Nov.). The subjects in which terms must be kept are: all those of the B.A., B.Sc., B.Sc. in H.Sc., M.B., Ch.B., B.D.S., and LL.B. degree courses; of the 1st and 2nd Divisions of the B.Com. course; of the Engineering Entrance examn. A student whose name is on the books of an affiliated College, and who has passed its annual examn., is deemed to have kept the terms of the year if he has attended the prescribed courses, *or*, being resident more than 10 miles from College or engaged in acquiring a profession or trade or earning a livelihood, has been thereby prevented from attending, *or* objects on grounds of religious scruples to such attendance.

**DEGREE COURSES:** 3 yrs.—B.A., B.Sc., B.Mus., B.Agr. (including practical work on farm), B.Sc. in Forestry; 4 yrs.—B.Sc. in Home Science, B.Sc.

in Archit. (including 18 mos.' practical work), LL.B., B.D.S., B.E. (Mech., Elec., Civ., Mining, Metall., including from 9 to 18 mos. in shops, mines, or surveying), B.Com.; 6 yrs.—M.B., Ch.B. The B.A. and B.Sc. courses are framed on a system of Pass and Advanced subjects. Each now consists of (a) 4 Pass and 2 Advanced or (b) 5 Pass and 1 Advanced or (c) 6 Pass subjects. English Lang. and Lit., Latin, Greek, French, and German are separate subjects for honours.

**HIGHER DEGREES.** M.A., M.Sc., LL.M., M.D.S., M.Com., M.S.; Litt.D., D.Sc., LL.D., M.D., D.Mus. The Mastership is obtained through examn. The Doctorate may be taken by a Bachelor of 5 yrs.' (in Med. 3 yrs.) standing who offers suitable original work and, if in Arts, Sc., or Law, has already obtained the Mastership or equivalent degree, or, if in Med. or Music, passes a prescribed examn.

**DIPLOMAS.** D.P.H. (9 mos.' course); Journalism, Education, Social Science, Banking. *Certificate of Proficiency in Dental Surgery.*

**PROFESSIONAL AND TECHNICAL SCHOOLS.** *Law* at all the Affiliated Colls., the chief school being that of Victoria; *Med. and Dent. and Home Science* at Otago; *Archit. and Engin.* (Civ., Elec., and Mech.) at Canterbury; *Mining and Civ., Elec., and Metall. Engin.* at Auckland and Otago; *Commerce and Music* mainly at Auckland and Canterbury; *Agric.* at a recognized (but not affiliated) Coll. at Lincoln.

"**AD EUNDEM**" **RECOGNITION.** Courses completed, or partially completed, at any British chartered or other approved Univ. are accepted *ad eundem*.

**SCHOLARSHIPS FOR GRADUATES.** In almost every subject of the B.A. or B.Sc. syllabus and in Law—£60 each; Travelling Scholps. in Arts and French—£200 (2 yrs.) each, in Engin. and Med.—£150 each. A National Research Scholarship (£100) is offered annually for each of the 4 Colleges for research in Science or Economics.

Two first-class return passages between Australia and England are offered yearly by the Orient Co. and P. & O. Co. for grads. of the Univ. proceeding to Europe to continue their studies. The Union S.S. Co. supplements this by a similar concession between N.Z. and Australia. One passage between N.Z. and England is offered by the N.Z. Shipping Co. and one by the Shaw, Savill & Albion Co.

**ADULT EDUCATION.** Classes are conducted under the control of the Council of each College through an Executive Committee on which the Council and the W.E.A. are represented.

**PUBLICATIONS.** *Calendar* (March), 2s. 6d.; *Minutes of Prods. of Senate*, free; *Examn. Papers*, 6d. or 1s. a set; *Reports of Examrs.* (in England and N.Z.) free; Reports (Govt. Press, Wellington) on Univ. Colls., 1912, 9d., and on Univ. Reform (with evidence), 1913, 2s. 3d.

## THE YEAR 1922

External examiners in N.Z. (two in Australia) were appointed for B.A. and B.Sc. Pass subjects, the teachers being associated with them. Greek History, Art and Lit. and Anthropology were added to the other B.A. Pass subjects.

**DEGREES CONFERRED.** B.A.—108; B.Sc.—32; LL.B.—50; M.B., Ch.B.—20; B.Com.—7; B.E.—7; B.Sc. Home Sc.—5; B.Agr.—2; M.A., M.Sc., and LL.M.—72; M.D.—2; Mus.B.—1; D.Sc.—2; D.Litt.—3.

# UNIVERSITY OF OTAGO, DUNEDIN

VISITOR—H.E. THE GOVERNOR-GENERAL.

CHANCELLOR—ANDREW CAMERON, B.A., LL.D.

VICE-CHANCELLOR—T. K. SIDEY, B.A., LL.B., M.P.

REGISTRAR—H. CHAPMAN, B.A.

## PROFESSORS, LECTURERS, ETC., August 24, 1922

<i>Accountancy</i>		<i>Education</i>	
Reid, G. W., B.Com.	Lectr.	Pinder, E., M.A.	Lectr.
<i>Accountancy Law</i> [Lectr.		<i>Engineering</i> , v. Mining	
Paterson, J. M., M.A., LL.B.		<i>English Lang. and Lit.</i>	
<i>Anatomy</i>		Ramsay, H., M.A. St. And.	Prof.
Gowland, W. P., M.D., B.S. Lond.,		Clement, Bertha, M.A.	Asst.
F.R.C.S. Eng.	Prof.	<i>Ethnology</i>	
<i>Biology</i>		Skinner, H. D., Dip. Anth. Camb.,	
Benham, W. B., M.A. Ox., D.Sc.		B.A.	Lectr.
Lond., F.R.S.	Prof.	<i>Geology and Mineralogy</i>	
Fyfe, Marion L., B.Sc.	Asst.	Benson, W. N., B.A. Camb., D.Sc.	
<i>Botany</i>		Syd., F.G.S.	Prof.
Aitken, Mary W., M.Sc.	Lectr.	<i>Hebrew</i>	
<i>Chemistry</i>		Cumming, J., M.A. Edin., B.D.	
Inglis, J. K. H., M.A., B.Sc.,		Lond., D.D. Melb.	Lectr.
D.Sc. Edin., F.I.C.	Prof.	<i>History</i>	
Carter, C. L., M.Sc.	Lectr.	Elder, J. R., M.A., D.Litt. Aberd.	
<i>Classics</i>			Prof.
Adams, T. D., M.A.	Prof.	<i>History, Constitutional</i>	
Turnbull, Mary I., M.A.	Asst.	Lang, J., M.A., LL.B.	Lectr.
<i>Dentistry</i>		<i>Home Science</i>	
Pickerrill, H. P., M.D., M.D.S.,		Rawson, G. Helen	Prof.
L.D.S. Eng.	Prof.	Strong, Ann G., B.Sc.	
Bell, R. C., B.D.S. Prof. (Clin. D.).			Prof. Domestic Arts.
Siedeberg, Emily H., B.Sc., M.D.,		Gloy, Olga H. M.	Asst.
Ch.B. (Anæsthetics)	Lectr.	Bagley, Sybil D.	Asst.
<i>Domestic Arts</i>		Little, Dora	Teacher.
Strong, Ann G., B.Sc.	Prof.	<i>Law</i> [Lectr.	
<i>Economics</i>		Stephens, A. C., LL.B. (Contracts)	
Pringle, W. H., M.A., LL.B. Edin.		Neill, A. G. (Crim. Law)	Lectr.
	Prof.	Adams, H. S., M.A., LL.B.	
		(Evidence)	Lectr.

- Hay, W. G., LL.M. (Jurispr.) Lectr.  
 Cook, H. L., LL.B. (Property) Lectr.  
 Adams, F. B., B.A., LL.M. (Property) Lectr.  
 Barrowclough, H. E., LL.B. (Proc.) Lectr.  
 Callan, J. B., B.A., LL.B. (Torts) Lectr.  
*Mathematics, Pure and Applied*  
 Bell, R. J. T., M.A., D.Sc. Glas. Prof.  
 Aitken, A. C., M.A. Asst.  
*Metallurgy and Assaying*  
 Waters, D. B., A.O.S.M. Prof.  
*Mining*  
 Park, J., M.A.I.M.E., M.I.M.M., F.G.S. Prof.  
*Modern Languages*  
 Thompson, G. E., M.A. Prof.  
 Barron, Vida M., M.A. Asst.  
*Philosophy, Ment. and Moral*  
 Dunlop, F. W., Ph.D. Jena, M.A. Prof.  
*Physics*  
 Jack, R., M.A., D.Sc. Glas., Ph.D. Göttingen. Prof.  
 Hinton, J. W., M.Sc. Lectr.  
 Blackie, Agnes R., M.Sc. Asst.  
*Physiology*  
 Malcolm, J., M.D. Edin. Prof.  
 Milligan, R. R. D., M.B., Ch.B. Asst.  
*Medicine* (for subjects of the first 2 yrs.—Anat., etc., v. *supra*)  
*Anæsthetics* [Tutor.  
 Marshall, A. McP., M.B., Ch.B.  
*Bacteriology and Pub. Health*  
 Hercus, C. E., M.D., D.P.H. Prof.  
 Cameron, Gladys C. M., M.Sc. Lectr.  
*Clin. Med. and Clin. Surg.*  
 The Hon. Staff of the Dunedin Hosp. Lectrs.  
*Clin. Med. and Therap.*  
 Fitchett, F. W. B., M.D., C.M. Edin. Prof.
- Dis. of Children*  
 Williams, E. H., M.B., Ch.B., M.R.C.S. Eng. Lectr.  
*Ear, Nose, and Throat*  
 Hall, A. J., M.B., Ch.B., M.R.C.S. Eng., L.R.C.P. Lond. Lectr.  
*Medicine, Practice of* [Prof.  
 Carmalt-Jones, D. W., M.A., D.M. Ox., F.R.C.P. Lond.  
 ..... Tutor.  
*Mental Diseases*  
 M'Killop, O. C., M.B., Ch.B. Edin. Lectr.  
*Midwifery and Gynæc.*  
 Riley, F. R., F.R.C.S. Eng., L.R.C.P. Lond. Lectr.  
 Ritchie, R. I., M.B., Ch.B., M.R.C.S. Eng., L.R.C.P. Lond. Tutor.  
*Ophthalmology* [Prof.  
 Ferguson, H. L., C.M.G., M.A., M.D. Dub., F.R.C.S.I., L.K.Q.C.P.I.
- Pathology*  
 Drennan, A. M., M.B., Ch.B., F.R.C.P. Edin. Prof.  
 Burns, C. R., M.B., Ch.B. Asst.  
*Radiology*  
 Cameron, P. D., M.D. Lectr.  
*Surgery*  
 Barnett, L. E., C.M.G., M.B., C.M. Edin., F.R.C.S. Eng. Prof.  
 Newlands, W., M.B., Ch.B. Edin., F.R.C.S. Edin., M.A., B.Sc. Asst. Lectr.  
 White, J. R., M.B., F.R.C.S. Eng. Tutor.  
 Fergus, T., M.B., F.R.C.S. Edin. Tutor.  
 Jenkins, J. A., M.B., Ch.B., F.R.C.S. Eng. Tutor.
- Adult Education**  
 11 Lecturers to W.E.A. Classes.  
 Secy.—G. McCracken.

## GENERAL INFORMATION

Founded by Ordinance of the Provincial Council in 1869 with power to grant degrees in Art, Medicine, and Law, the Univ. was opened in 1871. The Law School originated in 1873, the Medical in 1874, the School of Mines in 1878, the Dental School in 1907, the Accountancy Lectures and the Home Science Dept. in 1911. Between 1869 and 1877 the Univ. received grants of land exceeding 220,000 acres. It is entirely unconnected with any religious denomination except that the right of nomination to certain Chairs endowed by the Presbyterian Church rests with the Board of Church Property, subject to the approval of the Synod.

By an agreement effected in 1874 the Univ. agreed to hold in abeyance its power of granting degrees, and to become affiliated to the Univ. of N.Z.

**LIBRARY**, 15,000 vols. : also the Hocken collection of pamphlets and MSS. bearing on the History of N.Z. **MUSEUMS**: Biol., Ethnog., Geol., Anat., Path. **LABORATORIES**: Phys., Chem., Physiol., Bact., Path.

**FACULTIES**. Arts and Science, Medicine, Dentistry, Mining, Law, Commerce, and Home Science.

**COURSES**: for degrees in all the Faculties; D.P.H.; Certif. in Dent. Surg.; Associateship of Otago School of Mines (A.O.S.M.), 4 yrs.; Diploma of Mining, Metallurgy, Geology, or Land and Mine Surveyor, 2 yrs.; Associateship in Home Science, 4 or 3 yrs.

**RESEARCH SCHOLARSHIPS, ETC.** Edmond Industrial (Chemical) Research, £210, tenable 2 yrs.; Smeaton Research in Experimental Science, £250 (£75 for first year and £175 for second). The first is open to any person domiciled in N.Z., the second to graduates of Otago. Ross (Knox College), £150, 2 yrs.; Sir R. Stout (Economics), £50; and Anna P. Stout (Economics and History—women); all open to graduates of Otago.

**HOSTELS**. Presbyterian for men and women; Anglican for men; Home Science Students'. Cost of board and lodging, 21s. to 30s. a week.

**ADULT EDUCATION**. Since 1916 classes in connexion with the W.E.A. in Dunedin and Invercargill have met with very great success.

## THE YEAR 1921-22

**BENEFACTION**. George Young, £1500 for scholarship.

**NEW BUILDINGS**. Drill Hall, £10,000, and Physics Dept., £25,000, completed.

**NUMBER OF STUDENTS (1922)**. Preparing for first degree: in Arts, 312, including 176 women; Sc., 31 (women, 7); Law, 67; Commerce, 45 (w., 2); Med., 359 (w., 46); Dent., 86 (w., 11); Home Sc., 52; Mining, 13; graduate students, 54 (w., 21); occasional students, 194 (w., 78).

**ADULT EDUCATION**. 21 Tutorial Classes were held. Average attendance, 360.

# CANTERBURY COLLEGE, CHRISTCHURCH

VISITOR—THE MINISTER OF EDUCATION.

CHAIRMAN OF BOARD OF GOVERNORS—H. D. ACLAND, B.A.

RECTOR—PROF. C. CHILTON, M.A., D.Sc., etc.

REGISTRAR—L. A. STRINGER.

## PROFESSORS, LECTURERS, ETC., September 1922

<i>Accounting, etc.</i>		Morrison, A. F.	Lectr. & Demr.
Morrison, J., F.I.A.N.Z.	Lectr.	Powell, P. H., M.Sc. Manc., M.Eng.	
Smith, W. A., A.I.A.N.Z.		Liv., M.I.E.E. (Elec. E.)	
	Asst. Lectr.		Lectr.
<i>Biology</i>		Robinson, W. F., F.R.G.S. (Surveying, etc.)	Lectr.
Chilton, C., M.B., C.M. Edin., Hon.		Steele, S., B.Sc. Eng. (Mech. E.)	Lectr.
LL.D. Aberd., M.A., D.Sc., F.L.S.	Prof.		
Herriott, Eliz. M., M.A.		Tuck, H. P., B.Sc., B.E. Adel.	
	Asst. Lectr.	(Elec. E.)	Demr.
Murray, Flora B., M.A.			
	Asst. Lectr.	<i>English</i> [Prof.	
<i>Chemistry</i>		Wall, A., M.A. Lond., B.A. Camb.	
Denham, H. G., M.A., M.Sc., D.Sc.		Cane, T. W., M.A.	Asst. Lectr.
Liverpool, Ph.D. Heidelberg	Prof.	<i>Forestry and Botany</i>	
Page, S., B.Sc.	Demr.	Foweraker, C. E., M.A.	Lectr.
<i>Classics</i> [Prof.		<i>French and German</i>	
Stewart, H., C.M.G., M.A. Camb.		Blunt, T. G. R., M.A. Ox.	Prof.
Broadhead, H. D., Litt.D. N.Z., B.A. Camb. and N.Z.		White, J. F. D., B.A., B.Sc. N.Z. (French)	Asst.
	Asst. Lectr.	<i>Geology and Geography</i> [Prof.	
<i>Economics</i>		Speight, R., M.A., M.Sc., F.G.S.	
Condliffe, J. B., M.A.	Prof.	<i>History</i>	
Tocker, A. H., M.A.	Asst. Lectr.	Hight, J., M.A., Litt.D.	Prof.
<i>Education</i>		Candy, Alice, M.A.	Asst.
Shelley, J., M.A. Camb.	Prof.	<i>Journalism</i>	
Purchase, J. E., M.A.	Lectr.	Henderson, A. G., B.A.	
<i>Engineering</i>			Asst. Lectr.
Scott, R. J., M.I.C.E., M.I.M.E., F.A.I.E.E.	Prof.	<i>Law</i>	
Bamford, P. G., B.E.	Demr.	Rowe, T. W., M.A., LL.B.	Lectr.
Campbell, R. A., B.Sc. (Eng.), A.M.I.C.E.	Lectr. in Civ. E.	Cuthbert, R. A., B.A., LL.B. (Indust. and Comm. L.)	
			Asst. Lectr.

Hunter, W. J., LL.B. Asst. Lectr.  
 Taylor, A. S., B.A., LL.M. (Pro-  
 perty, etc.) Asst. Lectr.

*Philosophy, Mental and Moral*  
 Salmond, C. F., M.A. Prof.  
 Parr, S., M.A. Asst.

*Mathematics and Nat. Philos.*  
 Gabbatt, J. P., M.A. Camb., M.Sc.  
 Manc. and Liv. Prof.  
 Darwin, L. J., M.A. Adel.  
 Asst. Lectr.

*Physics*  
 Farr, C. C., D.Sc. Adel. Prof.  
 Macleod, D. B., M.A., B.Sc. Demr.

*Music* [Lectr.  
 Bradshaw, J. C., Mus.D. Manc.,  
 F.R.C.O., L.R.A.M., A.R.C.M.

*Adult Education*  
 Of 15 Tutors for W.E.A. Classes  
 3 are on staff of College.

## GENERAL INFORMATION

Created by Provincial Ordinance, and affiliated to the Univ. of N.Z., 1873. Govt. endowments—£179,000, including £83,000 for the F'zh Schools, School of Art, Museum, and Public Library controlled by the Board of Govrs. Annual grants—£8000, including £3750 for *Engineering*, the national School of Engin. in N.Z. The *Rector* is the academic head of the College and the permanent Chairman of the Professorial Board. LABORATORIES. Biol., Chem., Engin., Phys.

DEGREE COURSES in Arts, Science, Mus., Com., and Engin., and Certif. courses in Engin. (3 yrs.) and Com. (2 yrs.). Evening courses in Mech. and Elec. Engin.

RESIDENCE. Hostels for men (40) and women (40) students.

PUBLICATION. *Calendar* in March.

SCHOLARSHIPS include one of £50 for research in Science, open to graduates, renewable up to 3 yrs.; one of £150 p.a. for 2 yrs. plus £38 for travelling, tenable at Royal Holloway Coll., England; one of £150 in Engineering, open to B.E., tenable outside N.Z.

## THE YEAR 1921-22

NEW POSTS. Chair of Geology in place of Lect'ship. NUMBER OF STUDENTS IN 1922: 594 (including non-matriculated, 97 men, 70 women), of whom 169 were women; in addition there were in School of Engin. and Tech. Sc. 255 (122 matriculated). Pursuing full degree courses, 304 (82 women), namely, in Arts, 186; Law, 59; Commerce, 11; Science, 29; Med., 6. ADULT EDUCATION: 22 W.E.A. classes with 675 students; 14 public lectures; summer school for 2 weeks, attended by 100, main subject being Educn. and Citizenship; winter school for teachers and farmers, attended by 75. In addition there were, unconnected with W.E.A., short courses in Forestry and the British Coal measures.

# AUCKLAND UNIVERSITY COLLEGE

VISITOR—THE MINISTER OF EDUCATION.

CHAIRMAN OF COUNCIL—HON. G. FOWLDS., C.B.E.

REGISTRAR—A. B. CHAPPELL, M.A.

## PROFESSORS, LECTURERS, ETC., September 1922

<i>Accounting, etc.</i>		<i>English</i>
Seaman, A. M.	Lectr.	Egerton, C. W., M.A. Dub. Prof.
<i>Architecture</i>		Ardern, P. S., B.A. Ox., M.A.
Cumming, W. A.	Lectr.	Asst. Lectr.
Morran, H. S., A.R.I.B.A.	Lectr.	<i>Geology</i> [Lectr.]
<i>Biology</i> [Prof.]		Bartrum, J. A., M.Sc., A.O.S.M.
Johnson, J. C., M.A., M.Sc., M.B., B.Ch. N.U.I., Litt.D., F.Z.S.		<i>History and Economics</i>
McGregor, W. R.	Lectr.-Demr.	Grossmann, J. P., M.A. Prof.
<i>Botany</i>		<i>Law</i>
Lancaster, T. L., B.Sc. Asst. Lectr.		Algie, R. M., LL.M. Prof.
<i>Chemistry</i>		Grey, P., LL.B. Asst. Lectr.
Worley, F. P., D.Sc. Lond., M.A., M.Sc., D.I.C., F.C.S.	Prof.	Tuck, W. R., M.A., LL.M. Asst. Lectr.
Bowell, A. H., F.C.S. Lectr.-Demr.		<i>Mathematics</i>
Short, W. F., M.Sc. Manc., A.I.C., F.C.S.	Lectr.-Demr.	Segar, H. W., M.A. Camb. Prof.
<i>Classics</i> [Prof.]		<i>Mental and Moral Philosophy</i>
Dettmann, H. S., B.A. Syd., M.A., B.C.L. Ox., Hon. M.A. Adel.		Anderson, W., M.A. Glas. Prof.
.....	Asst. Lectr.	<i>Modern Languages</i>
<i>Dental Anatomy</i>		Walker, M., M.A., B.Com. Prof.
Carter, A. M.	Lectr.	<i>Music</i>
<i>Education</i>		Thomas, W. E., Mus.D. Ox. Prof.
Cousins, H. G., M.A.	Lectr.	<i>Physics</i>
Fitt, A. B., Ph.D. Leip., M.A.		Burbidge, P. W., B.A. Camb., M.Sc. Prof.
Asst. Lectr.		Salt, G. McB., M.Sc. Demr.
<i>Engineering</i>		<i>Adult Education</i>
Lamb, S. E., B.Sc. Lond., A.R.C.S. Eng., A.M.I.M.E. (Applied Mechanics, etc.)	Lectr.	Of 13 Tutors assisting the Tutor- Organizer appointed by the W.E.A. (L. A. Mander, M.A. Adel.), 3 are members of the College staff.
W. S. Wright (Elec. E., etc.)	Lectr.	
Gray, W. S., B.A., M.A.I. Dub., A.M.I.C.E.I. (Civil E., etc.)	Lectr.	
McLaren, E. J. R.	Demr.	



## GENERAL INFORMATION

Established by Act of the N.Z. Legislature in 1882, the College was affiliated to the Univ. of N.Z. in 1883. It received in 1885 an endowment of 30,000 acres of land, of which one-third was sold in 1915 for £10,246. It receives an annual grant of £11,500.

Of the 14 members of the College Council 3 are appointed by the Governor, 2 by the Prof. Board, 1 by local bodies, 4 are elected by the graduates, and 3 by the Auckland members of the General Assembly.

COURSES are provided for the degrees of the Univ. in Arts, Science (including B.Sc. in Archit.), Law, Music, Commerce, and for the Associateship of the College in Commerce (2 yrs.' course) and in Engineering (3 yrs.').

PUBLICATION. *Calendar* (Feb.), 1s.

THE YEAR 1922. The new Arts building and a students' building are now in course of erection. *Number of Students* (1921): Undergraduates, 681 (174 women); total, including non-matriculated students, 1063 (360 women). *W.E.A. Tutorial Classes*: 6 three-year and 7 one-year; average attendance, 304. *Degrees obtained*: B.A., 22; B.Sc., 7; LL.B., 8; B.Com., 2; M.A., 10; M.Sc., 4; Mus.B., 1.

# VICTORIA UNIVERSITY COLLEGE, WELLINGTON

VISITOR—THE MINISTER OF EDUCATION.

CHAIRMAN OF COUNCIL—P. Levi, M.A.

REGISTRAR—G. G. S. ROBISON, M.A.

## PROFESSORS, LECTURERS, ETC., September 1922

<i>Biology</i>		<i>Law, English and N.Z.</i> [Prof.
Kirk, H. B., M.A.	Prof.	Garrow, J. M. E., B.A., LL.B.
Pigott, Ellen, M.A. Asst. & Demr.		Watson, G. G. G., M.A., LL.B.
		Lectr.
<i>Chemistry</i>		McKay, Georgina Asst.
Robertson, P. W., M.A. Ox.,		
Ph.D. Leip., M.Sc.	Prof.	<i>Mathematics</i>
Munro, A. D., B.Sc.		Sommerville, D. M. Y., M.A., D.Sc.
	Asst. & Demr.	St. And. Prof.
<i>Classics</i>		McLeod, D., M.A. Glas., B.Sc.
Brown, J. R., M.A. Ox. and St.		Asst. & Instr.
And.	Prof.	
Ward, W. F., M.A., LL.B.	Asst.	<i>Modern Languages</i>
<i>Economics</i> [Prof.		Boyd-Wilson, E. J., M.A., B.Sc.
Murphy, B. E., M.A., B.Com.,		Prof.
LL.B. (E. Hist. & Geog.)		Thompson, J., M.A. Asst.
Neale, E. P., M.A., LL.B., B.Com.		
	Asst.	<i>Philosophy, Mental and Moral</i>
<i>Education</i>		Hunter, T. A., M.A., M.Sc. Prof.
Tennant, J. S., M.A., B.Sc.	Prof.	Woodhouse, Iris H., M.A.
		Asst. & Demr.
<i>English Language &amp; Lit.</i> [Prof.		<i>Physics</i>
Mackenzie, H., M.A. St. And.		Marsden, E., D.Sc. Manc. Prof.
.....	Asst.	Fenton, Ethel W. J., M.Sc.
<i>Geology</i>		Asst. & Demr.
.....	Prof.	
<i>History</i>		<i>Adult Education</i>
Wilson, F. P., M.A.	Prof.	Of the Tutors who conduct one-
		year classes under joint com-
<i>Law, Roman, etc.</i> [Prof		mittee of W.E.A. and College,
Adamson, J., M.A., LL.B. Edin.		3 are members of College staff.
Cornish, H. H., M.A., LL.B.	Asst.	Secy.—E. P. Neale, M.A.

## GENERAL INFORMATION

Established by Act of the N.Z. Legislature, 1897, and affiliated to the Univ. of N.Z., 1899. Endowed by Govt. with 4000 acres. College buildings, towards which Govt. gave £31,000, were opened in 1906. Annual grants about £14,000.

Full Degree *Courses* are provided in Arts, Science, Law, and Com., and the earlier stages in other Faculties.

RESEARCH SCHOLARSHIPS. J. Joseph, £60 for original work ; Mrs. S. A. Rhodes' Fellowship (£400) or Scholarship (£125-£250) for women students of Home Science, tenable for 2 years.

PUBLICATIONS. *Calendar* in March ; Students' magazine published towards end of each term.

## THE YEAR 1921

BENEFACTION—£150 for research in Physics. NEW BUILDINGS for Library and Physics Dept. opened by Govr.-Genl., Aug. 18, 1922. CLASS FEES raised by about  $\frac{1}{3}$ . NUMBER OF STUDENTS for degrees and diplomas, 613 (in 1920, 563) ; Occasional, 129. DEGREES OBTAINED—B.A., 29 (18 women) ; B.Sc., 10 ; LL.B., 17 ; B.Com., 3 ; B.Agric., 1 ; Higher Degrees, 17 (4 women). ADULT EDUCATION—16 one-year tutorial classes ; average attendance, 489.

# UNIVERSITIES OF THE UNION OF SOUTH AFRICA

UNIVERSITY OF SOUTH AFRICA, PRETORIA (formerly the Univ. of the Cape of Good Hope), with 6 CONSTITUENT COLLEGES.

UNIVERSITY OF STELLENBOSCH (formerly Victoria College, Stellenbosch).

UNIVERSITY OF CAPE TOWN (formerly South African College, Cape Town).

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG (formerly S. African School of Mines and Technology, and, later, University College, Johannesburg).

HISTORICAL SUMMARY (for which the Bureau is indebted to Professor Ritchie of Cape Town). The history of higher education in S. Africa covers but a comparatively short period of time. It may be said to have had its beginnings when, in 1829, the S. African College (now incorporated in the Univ. of Cape Town) was founded, as a proprietary institution, by a number of progressive citizens of Cape Town, assisted by subscribers from various parts of the country. This institution was, at its inception and for a long time afterwards, not much more than a higher-class school, but it had within it the possibilities of growth and started with very high aims. It had a very chequered history for some time, and was on more than one occasion in danger of extinction, but it gradually acquired a stronger position on ceasing to be a proprietary institution and receiving support from the public funds. For 20 years it remained the only educational establishment in S. Africa which aspired to anything beyond the range of elementary education, but in 1849 a rival College (the Diocesan) was started under the ægis of the Episcopalian Church at Rondebosch, a suburb of Cape Town. A few years later, in 1855, a somewhat similar College, St. Andrew's, was founded in Grahamstown, in the eastern part of the Cape Colony. Under the Governorship of Sir George Grey there was founded, in 1855, the Grey College at Bloemfontein in the Orange Free State, the first attempt at higher education beyond the borders of the then Cape Colony. None of these Colleges were well equipped, and most of the work done by them was school work rather than Univ. work, but they gradually acquired a growing influence and formed centres at which development was only a question of time. A very strong impetus in the direction of higher education was given in 1858 by the establishment of a Board of Examiners in Literature and Science. This Board had in view in the first instance the testing by means of examination of the competency of candidates for the Civil Service and public offices, but

it soon extended its scope and started examinations on more distinctively Univ. lines, corresponding roughly to Matricn., B.A., and M.A. The competition between the existing Colleges caused by these examns. had undoubtedly a strong influence on the growth of these Colleges and the greater attention paid to subjects beyond the mere school range. This Board continued to exist until 1873, when a successful attempt was made to institute a Univ. for S. Africa. The Univ. of the Cape of Good Hope, which was then founded, continued to exist until the beginning of 1918, when it was transformed into the Univ. of S. Africa, with its administrative seat at Pretoria. This Univ. was modelled on the lines of the London Univ., as then existing, as a purely examining body. It was governed by a Council, half of whose members were nominated by the Government, half elected by the members of Convocation. It had no constitutional connexion with the Colleges which prepared students for its examns., but the members of the Council who were elected by Convocation tended gradually to be almost entirely members of the teaching staffs of the various Colleges. In this indirect fashion the Colleges had a considerable influence on the development of the Univ. and the extension of the range and scope of its examns. Almost at the same time as the founding of the Univ. of the Cape of Good Hope there was passed by the Cape Parliament a Higher Education Act, which gave definite salary grants to the professors at recognized Colleges. This Act, together with the new impulse given to higher education by the new Univ., had a very marked influence on the development of the Colleges, which now began to increase in staff and numbers of students. The new College of Stellenbosch (afterwards the Victoria College and now the Univ. of Stellenbosch) was founded in 1874, and grew very rapidly, until it was a formidable rival of the older College at Cape Town. Other Colleges were founded also at Somerset East (Gill College) and Port Elizabeth (Grey Institute), but these had only a very short term of life. At a considerably later period, as S. Africa grew in population and wealth, other Colleges sprang into existence. A College for women (the Huguenot College) was founded at Wellington in 1898. In 1904 St. Andrew's College at Grahamstown separated its College department from its school, and the former became incorporated as the Rhodes College. In the same year was founded at Johannesburg an Institute, designed in the first instance for instruction in mining but afterwards developed into a College for higher education generally, and now The University of the Witwatersrand. In 1908 a Univ. College was founded at Pretoria, and in 1909 a similar College was instituted at Pietermaritzburg, Natal.

In 1904 there began a movement for the institution of a teaching, in place of the examining, Univ., and the controversy regarding the rival claims of a federal and a single-college Univ. continued for a number of years. An Inter-Colonial Conference on Univ. Education in 1908 reported in favour of a federal scheme, but nothing came of its decision. A new factor in favour of a teaching Univ. was introduced by the munificent gifts for this purpose of Mr. Alfred Beit, his brother, Mr. (now Sir) Otto Beit, and Sir Julius Wernher. In consequence of these gifts, various attempts were made by the Government to solve

the knotty question of reconciling claims of the existing Colleges with the institution of one or more teaching Univs. A parliamentary committee deliberated on the subject in 1913, and a Commission was appointed in the same year and, after taking evidence, issued its report in 1914. This Commission proposed two Univs., one consisting of a federation of the S. African College and the Victoria College, the other of a federation of the remaining Colleges (Rhodes College being allowed the choice of joining whichever federation it pleased), but the proposal led to no practical result, chiefly owing to the objection on the part of the two oldest and strongest colleges, at Cape Town and Stellenbosch, to the loss of their independence. The problem was at length solved in 1916 by giving charters to both the S. African College and the Victoria College, and by the reincorporation of the old Univ. of the Cape of Good Hope as a federal Univ. embracing all the other Colleges under the name of the Univ. of S. Africa.

The three Acts passed by the Union of S. Africa in 1916 were to the following effect :

I. The Univ. of the Cape of Good Hope became the Univ. of South Africa, with its administrative seat at Pretoria.

II. The South African College became the Univ. of Cape Town, with which is incorporated the S. African College. Its seat is to be upon the Groote Schuur estate on the eastern slopes of Table Mountain.

III. The Victoria Collège, Stellenbosch, became the Univ. of Stellenbosch, with its seat in the division of Stellenbosch in the Province of the Cape of Good Hope.

The Faculties of the Univ. of Stellenbosch are defined as—Arts, Science, Education, Agric., Law, Music; of the Univ. of Cape Town as—Arts, Science, Medicine, Law, Engineering, Education; of the Univ. of South Africa the Faculties are not defined, but permission is given to each of the constituent Colleges to establish such faculties or depts. as it may deem fit; provided that it shall not, without the consent of the Govr.-General, apply towards the maintenance of a faculty or dept. not established at the commencement of this Act any money granted to the College from public funds. A schedule is appended to the Act stating that professional examns. will be conducted in Law and Jurisprudence, in Civil Service Law, and in the Theory of Land Surveying.

In 1921 Parliament passed a further Act, which has the effect of incorporating, with effect from March 1, 1922, as "The University of the Witwatersrand, Johannesburg" the University College, Johannesburg (formerly the S. African School of Mines and Technology, and one of the constituent colleges of the University of S. Africa). Its Faculties are defined as Arts, Science, Medicine, Law, Engineering, Commerce.

Each of the four Univs. is governed by Council, Senate, and Convocation. The Senate of the Univ. of South Africa consists of the Professors and Lecturers of the constituent Colleges who are heads of such departments as are recognized by the University Council; the Senates of the Univs. of Stellenbosch, the Witwatersrand, and Cape Town consist in each case of the Principal, the Vice-Chancellor, two additional members of the Council appointed for a prescribed period,

and the Professors and Lecturers who are heads of their respective departments.

CONFERENCE. The Vice-Chancellors of the Univs. acting as a Joint Committee (known as *The Vice-Chancellors' Committee*) have, in the exercise of powers conferred by the above-mentioned Acts, made joint statutes and regulations relating to the Joint Matricn. Board, the Joint Committee for Professional Examns., the administration of the Joint Scholarship Funds of the four Univs., the admission of registered students of any one of the Univs. to any of the others, and a minimum period of attendance and minimum fees for the Degree of Bachelor. They have power to formulate regulations dealing with any other matters of common interest. The JOINT MATRICULATION BOARD (Secy.—The Registrar, Univ. of S. Africa) has been constituted to control and conduct the Matricn. Examns. of all the Univs. The examns. are held in Dec. and one other month. There are two alternative sets of regulations—the interim and the new. Under interim regulations a candidate must take (1) English or Dutch, (2) Latin or French or German, (3) Maths., (4) Greek or Hist., (5) Physics or Chem. or Phys. Sci. or Bot. or Zool., (6) Engl. or Dutch or French or Ger. or Gk. or Hist. or Portuguese or Hebrew or Native lang. Under the new regns. subjects are grouped thus: (1) English, Dutch; (2) Maths.; (3) Latin, Greek, French, German; (4) Physics, Chem., Bot., Zool., Geol.; (5) Hist., Geog., English, Dutch, Hebrew, addl. subject from 3 or 4; (6) Agric. Sc., Practical Maths., Mechanics, Bookkeeping and Comml. Arith., Shorthand and Typewriting, Drawing, Geom. Drawing, Domestic Sc., Music, addl. lang., addl. subject from 5. Under the new regns., if 6 subjects are taken, 1 must be selected from each group; if only 5 subjects are taken, 3 must be on the higher grade, 1 of which must be the subject from group (1), 1 a subject from group (2) or (3), and 1 from any other except (6). The 5 subjects must be selected from the groups 1 to 5 (inclusive) in such a way that not more than one of these groups is omitted. A JOINT COMMITTEE FOR PROFESSIONAL EXAMNS. (Secy.—The Registrar, Univ. of S. Africa) controls and conducts: (1) Law Certificate Examns., (2) Civil Service (Lower and Higher) Law Examns., (3) Examns. in Theory of Land Surveying, and (4) Final Examns. for Patent Agents. It also conducts in certain cases on behalf of the Supreme Court the Advocates' Admission Examn. in Roman-Dutch Law and the Statute Law of the Union.

TERMS. The academic year is usually divided into 4 terms, beginning in Feb. or March and ending Nov. or Dec.

# UNIVERSITY OF CAPE TOWN

WITH WHICH IS INCORPORATED THE  
SOUTH AFRICAN COLLEGE

VISITOR—THE GOVERNOR-GENERAL.

CHANCELLOR—THE PRINCE OF WALES.

VICE-CHANCELLOR—Principal Sir J. C. BEATTIE, D.Sc., F.R.S.E.

PRESIDENT OF CONVOCATION—Advocate R. W. CLOSE, K.C., B.A.,  
LL.B., M.L.A.

CHAIRMAN OF COUNCIL—J. M. RUSSELL, M.A., B.D.

REGISTRAR—W. G. R. MURRAY, M.A.

## PROFESSORS, LECTURERS, ETC., December 23, 1922

*Accounting and Business Method*  
Galbraith, H. G., B.A. Camb.,  
C.A. Edin. Lectr.

*African Life and Languages*  
Norton, W. A., M.A., B.Litt. Ox.  
Prof. of Bantu Philology.  
Brown, A. Radcliffe, M.A. Camb.  
Prof. of Soc. Anthropol.  
..... Lectr. in Phonetics.

*Afrikaans, v. Nederlands*

*Anatomy*  
Drennan, M. R., M.A., M.B., Ch.B.  
Edin. Prof.  
..... Sr. Lectr.  
Gorfinkel, M., M.A. Lectr.  
Hooper, O., B.A. Demr.  
Kaplan, B., M.B., Ch.B. Edin.  
Demr.

*Art* [Reader in Æsthetics.  
Kolbe, Mgr. F. C., D.D.]

*Bacteriology*  
Mackie, T. J., M.D., Ch.B. Glas.,  
D.P.H. Ox. Prof.  
Mulligan, W. P., M.B., Ch.B.  
Aberd., D.P.H. Camb.  
Asst. to Prof.

*Bio-Chemistry* [Prof.  
Edie, E. S., M.A., D.Sc. Edin.]

*Botany*  
Compton, R. H., M.A. Camb.  
Prof. and Dir. of National  
Bot. Gardens.  
Thoday, D., M.A. Camb. Prof.  
Stephens, Miss E. L., B.A., F.L.S.  
Sr. Lectr.  
Michell, Miss M. R., B.A. Lectr.  
Bolus, Mrs. F., B.A.  
Curator of Bolus Herbarium.  
Tredgold, Miss E. K., B.A. Demr.

*Chemistry*  
Tietz, H., M.A. Cape, Ph.D. Berl.  
(Organic) Prof.  
Thomas, J. Smeath, D.Sc. Liv.  
Prof. as from March 1,  
1923.  
Newbery, E., D.Sc. Manc., F.I.C.  
(Physical) Prof.  
Denham, H. G., Ph.D. Heid.,  
D.Sc. Liv., M.A., M.Sc. N.Z.  
(Inorganic) Prof.  
Pugh, W., B.Sc. Lond. Lectr.  
..... Demr.

*Classics*  
le Roux, T., M.A., Litt.D. Amst.  
Prof. (Gk.).  
Farrington, B., M.A. N.U.I.  
Lectr. (Gk.).



Ritchie, W., M.A. Aberd., M.A. Ox.  
Prof. (Latin & Class.  
Philol.).

..... Sr. Lectr. (Latin, etc.)

*Dutch*, v. Netherlands

*Economics*

Leslie, R., M.A. Edin., Dean of  
Fac. of Commerce Prof.

..... Sr. Lectr.

*Education*

Clarke, F., M.A. Ox. Prof.

Scrimgeour, A. C. S., M.A. Edin.  
(Method) Prof.

Jordaan, J. J., B.A. Cape Lectr.

Jamieson, J. N., M.A. St. And.

Sr. Lectr.

Broodrijk, H. H., B.A. Cape

Sr. Lectr.

*Electrotechnics*

[Prof.]

Bohle, H., M.V.D.E., M.I.E.E.

Rogers, A. H. E., A.C.G.I. Lond.

Sr. Lectr.

*Engineering, Civil*

Snape, A. E., M.Sc. Manc.,

A.M.I.C.E., F.R.San.I. Prof.

Stewart, G. S., A.M.I.C.E.

Sr. Lectr.

*Engineering, Mechanical* [Prof.]

McMillan, D., A.R.T.C., A.M.I.M.E.

Weaver, W. G., A.M.I.M.E.

Sr. Lectr.

Brooks, J. J., A.R.C.S. Lectr.

Halliday, V. N., B.Sc. Demr.

*English* [Prof. (E. Lit.).]

Clark, J., M.A., LL.D. St. And.

Mackie, W. S., M.A. Aberd.,

B.A. Ox. Prof. (E. Lang.).

Greenlees, Miss M., B.A. Lectr.

*Ethics and Politics*

Malan, G. H., M.A. Cape, D.Phil.

Glas. Prof.

*French and German*

Logeman, W. S., L.H.C. Utr. Prof.

Nauta, R. D., O.A. Prof.

Prinz, J., Ph.D. Munich Asst.

*Geology*, v. Mineralogy

*Hebrew*

Bender, A. P., M.A. Camb. Prof.

*History*

Walker, E. A., M.A. Ox. Prof.

Mandelbrote, H., M.A., B.A. Ox.

Sr. Lectr.

*Law*

[Prof.]

Wille, G., B.A., LL.B. Camb.

De Villiers, J. E., B.A., B.C.L.

Ox., B.A. Cape Lectr.

Howes, R. B., M.A., LL.D.

Dub., LL.B. Lectr.

Reid, F., B.A. Ox. Lectr.

Thompson, C. N., M.A. Cape,

LL.B. Camb. Lectr.

*Mathematics, Pure*

Crawford, L., M.A. Camb., D.Sc.

Glas. Prof.

Kent, T. P., M.A. Ox. Prof.

Skewes, S., B.Sc. Asst.

*Mathematics, Applied*

Brown, A., M.A. Camb., M.A.,

B.Sc. Edin. Prof.

v. d. Lingen, J. Steph., B.A.

Sr. Lectr.

*Mineralogy and Geology*

Young, A., M.A., D.Sc. Edin. Prof.

Walker, A. R. E., B.Sc. Lond.,

A.R.C.S. Lond. Sr. Lectr.

*Music*

Bell, W. H., F.R.A.M. Prof.

Hely-Hutchinson, C. V. N. Hope

Lectr.

*Nederlands en Afrikaans*

du Toit, P. J., M.A. Cape, Ph.D.

Ghent Prof. (Lang.).

Botha, M. C., M.A. Prof. (Lit.).

van der Merwe, I. W., M.A.

Lectr.

*Philosophy*, v. also Ethics

Reyburn, H., M.A., D.Phil. Glas.

Prof.

Eales, W. C., B.A. Cape Lectr.

*Physics*

Ogg, A., M.A., B.Sc. Aber., Ph.D.

Gött. Prof.

Schonland, B. F. J., O.B.E., B.A.

Camb. and Cape Sr. Lectr.

Hattingh, J. T., B.A. Cape, B.Sc. Lectr.	<i>Obstetrics and Gynæcology</i> Crichton, E. C., B.A., M.B., B.A.O., B.Ch. Dub. Prof.
<i>Physiology</i> Jolly, W. A., M.B., Ch.B., D.Sc. Edin. Prof.	<i>Obstetrics, Clinical</i> Simpson Wells, A., M.D. Glas., F.R.C.S.E. Lectr.
Morrison, Miss D., M.B., Ch.B. Edin. Sr. Lectr.	<i>Ophthalmology</i> Wood, D. J., M.B. Edin. Lectr.
Bosman, L. P., B.A. Cape Lectr.	<i>Pathology</i> Bartlett, G. B., B.A., M.B. Camb., M.R.C.S. Prof.
<i>Politics</i> , v. Ethics	Fuller, T. A., M.B., Ch.B. Edin. Asst. to Prof.
<i>Zoology</i> [Prof.] Gilchrist, J. D. F., M.A., D.Sc. Edin., Ph.D. Zur., F.L.S.	<i>Pharmacology</i> [Prof.] Gunn, J. W. C., M.B., Ch.B. Edin.
von Bonde, C., M.A. Lectr.	Ferguson, J. H., B.A. Lectr.
Swart, D. B., M.A. Demr.	<i>Public Health</i> [Prof.] Anderson, A. J., M.A., M.B. Ox., M.R.C.S., D.P.H. Camb.
<b>Medicine</b> (for subjects of the first 2 yrs.—Anat., etc., v. <i>supra</i> )	<i>Surgery</i> Saint, C. F. M., C.B.E., M.D., M.S. Durh., F.R.C.S. Prof.
<i>Anæsthetics</i> Daniell, G. W. Bampfylde, M.R.C.S. Lectr.	<i>Surgery, Clinical</i> Elliott, C. C., M.D., M.R.C.S. Lectr.
<i>Dermatology</i> Smith, Hugh, M.D. Lond. Lectr.	Fuller, E. B., M.B., F.R.C.S.E. Lectr.
<i>Ear, Nose, and Throat</i> Luckhoff, J., M.D. Edin. Lectr.	Moffat, H. A., F.R.C.S. Lectr.
<i>Med. Jurisprudence</i> [Lectr.] Engelbach, H. A., M.B. Dub.	Sandes, T. L., M.B., B.Ch. Dub. Clin. Tutor.
<i>Medicine</i> Falconer, A. W., C.B.E., M.D. Aber., M.R.C.P. Prof.	<i>Vaccination</i> Molteno, V. G., M.B. Camb. Lectr.
<i>Medicine, Clinical</i> [Lectr.] Marais, D. P., M.D., F.R.C.S.	<i>Venereal Diseases</i> Fraser, A. R., M.D. Lectr.
Gie, J. C., M.B. Lond., M.R.C.S. Eng. Tutor.	
<i>Mental Diseases</i> [Lectr.] Cassidy, C. G., M.B., C.M. Edin.	

## GENERAL INFORMATION (v. also p. 406)

The University of Cape Town, with which is incorporated the South African College, created by Act 14 of 1916, came into legal existence on April 2, 1918, when the Council took over a bequest by Sir Julius Wernher of £250,000 and a donation of equal amount from Mr. Otto Beit, who added £50,000 to a lapsed bequest by Mr. Alfred Beit. The S. African College, out of which the University grew, opened in 1829 as a private venture, became a public institution in 1837. In 1895 classes were opened in mining engineering. In 1900 the matriculation classes were transferred to the College school and the College confined itself to University teaching. In 1902 £40,000 was collected from past students and others, and courses for medical students and civil, mechanical,

and electrical engineers were begun. Provision was made in 1910 for post-graduate courses for the training of teachers, in 1917 for the third year of medical study, and in 1918 for a complete medical course. In 1921 Schools of Commerce and of Music were established. Early in 1921 a special appeal for funds was concluded; the amount obtained was about £280,000, including a sum of £50,000 for the Jameson Memorial Hall.

A site for the University has been provided by Government at Groote Schuur, a suburb of Cape Town. Pending the erection of buildings there, those formerly occupied by the Univ. of the Cape of Good Hope have been rented.

**LIBRARY**, 12,000 vols. Access to S.A. Public Library, 100,000 vols., specially well equipped in Bot. and Zool. Depts. Also Bolus Bot. Library and (for students of Teaching) the Library of the Educn. Dept. The Bolus HERBARIUM includes Guthrie Collection of Cape Flora. The S.A. MUSEUM of Nat. Science adjoins the Univ. grounds. **MARINE BIOL. LABORATORY** at St. James'.

**FACULTIES.** Arts, Commerce, Science, Engineering, Law, Medicine, and Education.

**DEGREE COURSES.** B.A., 3 yrs.; B.Sc. (in Pure Sc.), 3 yrs.; B.Com., 3 yrs.; LL.B., 4 yrs.; B.Sc. (in Applied Sc.), 4 yrs.; B.Mus., 4 yrs.; M.B., Ch.B., 6 yrs.; M.A., 1 yr.; M.Sc., 1 yr. The M.A. and M.Sc. courses are open to graduates of any approved Univ.; so also are courses for the Ph.D. (open to bachelors of at least 3 yrs.' standing), and D.Litt., D.Sc. (open to bachelors of at least 4 yrs.' standing), for which attendance for 2 yrs. may be required. The LL.M. is open to LL.B. after 2 yrs.' attendance; the LL.D. is open to LL.B. or LL.M.

**OTHER COURSES.** For Teachers' Certificate.—T.1 (Union of S. Africa 1st Class Teacher's Certif.), Secondary Higher, Secondary Lower, Primary Higher; Univ. Diploma in Commerce, Law Certif., Land Surveying, Civil Service Law examn., Dentistry (preliminary subjects), and for students of Agric. and Theol. proposing to graduate in those subjects elsewhere.

**RECOGNITION OF AND BY OTHER INSTITUTIONS.** Attendance in Stellenbosch and the constituent Colls. of the Univ. of S. Africa is accepted under certain conditions as part of the attendance qualifying for degrees. Attendance on classes in Physics, Chem., Bot., and Zool. are accepted by Aberd., Bris., Durh., Edin., Glas., Liv., Manc., Dub., R.C.P. Lond., R.C.S. Eng.; so also are examns. in the Faculty of Arts on the special courses in these subjects (except by Dub.). Attendance on courses in Anat. and Physiol. is accepted by Aberd., Durh., Edin., and Glas., R.C.P. Lond., and R.C.S. Eng.; examns. in the Faculty of Arts in these subjects are accepted by Aberd. (v. also pp. 237 and 266). The Dentistry course is recognized by the R.C.S. Eng., R.C.P.S. Edin., and Edin. Dental School; the Hygiene course by the Conjoint Boards of Eng., Ire., Edin., and Glas.

**FEES.** For tuition, including registration, excluding laboratory fees, annually: Arts or Sc., from £21 to £29; Engin., £29 to £33; Med., £35 (average); Law (LL.B.), £21 to £27, Law Certif., £9; Teaching, £9 to £13; Surv., £21 to £25; Commerce, £11. Examn. and graduation fees, minimum: B.A. or B.Sc., £11; B.Sc. Engin., £20; LL.B., £30; M.B., Ch.B., £30; Master's degree, £6; Doctor's, £13.

**SCHOLARSHIPS OPEN TO GRADUATES OF THE UNIV.** Jamison, Croll, Porter, George Grey, Donald Currie, Willem Hiddingh, H. B. Webb, and several others, of £150 and £200 p.a., tenable generally for 3 yrs., and awarded from time to time after the M.A. examns. £150 p.a. for 2 yrs., awarded annually after the B.Sc. (Engin.) examn.

Travelling concessions to students are granted by the Union-Castle S.S. Coy. and (except to law students and married persons) by the Union Railways.

RESIDENCE. Hostels for 180 men and 80 women. Board and residence, £60 p.a.

PUBLICATIONS. *Calendar* (Dec.) ; Students' Repve. Council's *University Quarterly* ; *Annals of the Bolus Herbarium*.

## THE YEAR 1922

BENEFACTIONS. Scheeper's Memorial Scholarship, in Law, £20 p.a. ; Purcell Memorial Prize.

NEW DEPARTMENTS AND POSTS. Asst. in German ; 2 addl. Lectrs. in Law and 1 Lectr. in Banking Practice for Faculty of Commerce ; Lectr. in Music ; Clin. Tutor in Surgery.

NEW DEGREE. B.Sc. in Pure Science (3 years' course).

DEGREES (1921). B.A., 62 ; B.Sc. in Engin., 14 ; LL.B., 7 ; M.A., 14 ; D.Sc., 1 ; M.Sc., 1 ; D.Sc. (*honoris causa*), 1.

NUMBER OF STUDENTS (1921). Undergraduates preparing for B.A.—303 ; B.Sc. in Engin.—92 ; LL.B.—28 ; M.B., Ch.B.—209 ; Dental—30 ; Land Survey.—4 ; Sec. Teachers' Lower Certif.—24 ; Primary Teachers' Higher Certif.—37 ; Pharmaceutics—18 ; Law Certif.—42 ; Diploma in Commerce—55 ; Graduates preparing for M.A. and M.Sc.—25 ; other Higher degrees—1 ; Sec. Teachers' Higher Certif.—30 ; D.P.H.—3. Occasional, 15. Total—915, including women—215. Students who left to continue studies in U.K., America, or Holland in 1922 : med. or dental, 52 ; Arts studies, 4.

SPECIAL COURSES OF LECTURES : (i.) for School Teachers (in Long Vacation) ; (ii.) for Pharmaceutical students by Prof. Gunn ; (iii.) on Irrigation and Water Supply, by F. E. Kanthack, M.I.C.E. ; Æsthetics, by Mgr. Kolbe ; the Motor Car, by Prof. McMillan ; University Extension Lectures given by members of the Staff.

RESIGNATIONS. D. Thoday (from Dec. 31) to be Prof. at Univ. Coll., Bangor ; J. F. Burger ; A. D. Ketchen ; J. B. Lester ; S. Skewes (from Dec. 31) ; C. W. v. d. Merwe.

# UNIVERSITY OF SOUTH AFRICA

(By Act 12 of 1916 of the Legislature of the Union of South Africa the UNIVERSITY OF THE CAPE OF GOOD HOPE, incorporated by Act of the Cape Legislature in 1873, became and was incorporated in the University of South Africa with administrative seat at Pretoria, v. p. 408.)

CHANCELLOR—Field-Marshal H.R.H. THE DUKE OF CONNAUGHT AND STRATHEARN, K.G., K.T., K.P.

VICE-CHANCELLOR AND CHAIRMAN OF COUNCIL—J. E. ADAMSON, M.A., D.Litt.

CHAIRMAN OF SENATE—Professor J. W. BEWS, M.A., D.Sc.

REGISTRAR—C. C. GRANT, M.B.E., M.A. (P.O. Box 392, Pretoria).

PRESIDENT OF CONVOCATION—BERTHA STONEMAN, D.Sc.

## CONSTITUENT COLLEGES

GREY UNIVERSITY COLLEGE, Bloemfontein (1855).

HUGUENOT UNIVERSITY COLLEGE, Wellington (1874).

NATAL UNIVERSITY COLLEGE, Pietermaritzburg (1909).

RHODES UNIVERSITY COLLEGE, Grahamstown (1855).

POTCHEFSTROOM UNIVERSITY COLLEGE (1922).

TRANSVAAL UNIVERSITY COLLEGE, Pretoria (1903).

FACULTIES : Arts (including Divinity and Music), Science, Engineering, Agriculture, Law, Commerce, Veterinary Science.

DEGREES. B.A., M.A., D.Litt., D.Phil. ; B.D., D.D. ; B.Mus., M.Mus., D.Mus. ; B.Com., M.Com. ; B.Econ., M.Econ. ; B.Sc., M.Sc., D.Sc. ; B., M., and D.Sc. in Engin. ; B., M., and D.Sc. in Agric. ; LL.B., LL.M., LL.D. ; B.V.Sc., D.V.Sc.

Courses for B.A., B.Com., B.Econ., B.Sc.—3 yrs. ; for B.Sc. Engin., B.Sc. Agric.—4 yrs. ; B.V.Sc.—5 yrs. *Internal* candidates for these degrees must have attended as registered matriculated students at a constituent Coll. for the prescribed periods, provided that the Senate will accept as qualifying attendance on recognized courses at the Univ. of Cape Town or Stellenbosch and may accept attendance and examns. at other recognized Univs. But the minimum attendance on approved courses at the Univ. of S.A. for the Bachelor's degree in Applied Science is the final 2 yrs., and for other Bachelor's degrees one-half of the courses prescribed. *External* students must have their curricula approved by the Senate and must pass the examns. prescribed for them from year to year by the Senate in order to qualify for degrees.

*Higher Degrees.* The M.A., M.Sc., and M.Sc. (Agric.) courses each cover 1 yr. (after graduating as bachelor). The M.Sc. (Engin.) may be conferred on a B.Sc. (Engin.) who has had, since graduating, 2 yrs.' practice of his profession. A thesis is required for the M.Sc. (Agric.) or M.Sc. (Engin.). Doctorates are granted for approved theses to bachelors of at least 5 yrs.' or masters of at least 4 yrs.' standing (reducible to 4 and 3 respectively in consideration of attendance for one year as a research student at an approved institution). The master's and doctor's degree may also be conferred *honoris causa*.

*Research (Bachelor) Degrees.* On proof of special qualifications in any direction a person may be exempted from the matricn. examn. and admitted to courses of special study and research with a view to graduation, the conditions being determined by Boards of Faculty subject to approval of Senate.

*Diplomas* in Domestic Science open to matriculated students—3 yrs.' course; (as a temporary measure) in Commerce and Public Admn.—non-matriculated students who fulfil examn. requirements for B.Com. or B.Econ. Diplomas in Educn. and in Journalism are under consideration.

SCHOLARSHIPS FOR GRADUATES: 2 or 3 of £150 to £200 p.a. for 3 yrs. awarded annually on results of M.A. and M.Sc. examns.; Webb research S., £200, open to M.A. or M.Sc. of not more than 2 yrs.' standing, undertaking approved course of research work, renewable up to 3 yrs.

SCHOOL AND MUSIC EXAMNS. The Univ. controls and conducts a *Junior Certificate* examn. of standard 2 yrs. below matricn., and examns. for Music Certifs. and Licentiate Diplomas (for Teachers of Music and Solo Performers). The examiners in the practical music examns. are nominated by the Assoc. Board of R.A.M. and R.C.M., London.

THE YEAR 1921. *Number of Students*, internal, 1322, external, 317. Qualified for degrees: B.A., 123, including 56 women; M.A., 11 (2 women); B.D., 2; B.Sc., 40 (7 women); M.Sc., 10 (1 woman); D.Sc., 1; LL.B., 9; B.Sc. in Engin., 8, in Agr., 6; B.Com., 5; D.Litt. (Hon.), 1. *Junior Certif. candidates*, 525; *Music*, theory, 3810, practical, 3004.

# GREY UNIVERSITY COLLEGE, BLOEMFONTEIN, O.F.S.

CHAIRMAN OF COUNCIL—J. S. M. RABIE, B.A. Cape.

RECTOR—Rt. Rev. J. D. KESTELL.

REGISTRAR—R. B. SAAYMAN, B.A.

## PROFESSORS, LECTURERS, ETC., November 1, 1922

<i>Afrikaans and German</i>		<i>History and Economics</i> [Lectr.	
Malherbe, D. F., B.A. Cape, Ph.D.		Barnard, S. P., Litt. Docts. Leyd.	
Frei.	Prof.		
<i>Botany</i>		<i>Law</i>	
Potts, G., B.Sc. Durh., Ph.D.		Streeten, R. C., B.A. Ox., LL.B.	
Halle	Prof.	Cape	Lectr.
Gemmell, Miss D. M.	Demr.	Hœxter, O., B.A., LL.B. Cape	
			Lectr.
<i>Chemistry</i>		<i>Mathematics</i>	
Rindl, M., D.Ing. Charl.	Prof.	Arndt, W. F. C., B.A. Cape, Ph.D.	
Zweerts, F., Ingr. Delft	Lectr.	Gött.	Prof. of Pure M.
		Mudd, N., M.A. Camb. (Applied	
		M.)	Lectr.
<i>Classics</i>		<i>Pedagogy</i>	
Ross, J. A., M.A. Cape (Greek)		Eybers, E., M.A. Edin., D.Ed.	
	Lectr.	New York	Prof.
Conlin, W., M.A. Dub. (Latin)	Prof.		
<i>Dutch and French</i>		<i>Philosophy</i>	
Francken, A., B.A. Cape	Prof.	Forsyth, T. M., M.A., D.Phil.	
		Edin.	Prof.
<i>English</i>		<i>Physics</i>	
Johnson, W. S., M.A., R.U.I.	Prof.	Logeman, W. H., M.A. Cape	Prof.
		Rau, O., B.Sc.	Demr.
<i>Geology</i>		<i>Zoology</i>	
Von Bonde, W., M.A., D.Sc. Cape		Dreyer, T. F., B.A. Cape, Ph.D.	
Town	Lectr.	Halle	Prof.
<i>History (S. African)</i>		Meiring, A. D., B.Sc.	Demr.
The Rector	Prof.		

## GENERAL INFORMATION (v. also pp. 406, 415)

Founded in 1855 by Sir George Grey, the College was reorganized in 1904, constituted a Univ. College in 1907, and incorporated by statute in 1910. It is 2 miles from Bloemfontein town. It provides *courses* for degrees in Arts, Science, and Law, and for the Teachers' 1st class Certif. of the Union, and prelim. training for Med., Engin., Agric., and Comm.

HOSTELS for men and women within the Coll. grounds. BOARD AND RESIDENCE : £15 per quarter. TUITION FEES : £5 per quarter (Law, £2 : 10s.).

SCHOLARSHIPS, open to residents of O.F.S. for study abroad, 4 or 5 of £150 p.a. for 3 yrs. ; of these 3 are for Agric. study.

### THE YEAR 1922

NUMBER OF STUDENTS. Preparing for Bachelorships—115, including women—27 ; for Teacher's Certif.—37 ; Law Certif.—13 ; M.A. or M.Sc.—4 ; Survey—3 ; Med.—4 ; Pharmacy—8 ; LL.B.—7.

DEGREES OBTAINED (1921). B.A.—13 ; B.Sc.—6 ; M.A. or M.Sc.—2 ; LL.B.—1.



# RHODES UNIVERSITY COLLEGE, GRAHAMSTOWN, C.P.

CHAIRMAN OF COUNCIL—THE BISHOP OF GRAHAMSTOWN.

CHAIRMAN OF SENATE—Professor BOWLES.

REGISTRAR OF COUNCIL AND SECRETARY OF SENATE—Lieut.-Col. H. GREENER, D.S.O.

## PROFESSORS, LECTURERS, ETC., August 23, 1922

<i>Accounting, Business Management, etc.</i>	<i>English</i>
Williamson, J. W. M., C.A. Lectr.	Kidd, A. S., M.A. Camb., Manc., and Cape Prof.
<i>Anatomy</i> [Lectr.]	McWilliam, Miss J. F. Lectr.
Drury, E. G. D., B.S. Lond., D.P.H. Durh., M.D. Cape.	<i>French</i>
<i>Botany</i>	Bodmer, H. S. Prof.
Schönland, S., Ph.D. Kiel, Hon. M.A. Ox. Prof.	<i>Geology</i>
Britten, Miss L., B.A. Cape Lectr.	Schwarz, E. H. L., A.R.C.S. Lond., F.G.S. Prof.
<i>Chemistry and Metallurgy</i>	<i>German and Dutch</i>
Cory, Sir G. E., M.A. Camb., Durh. and Cape, Litt.D. Camb. Prof.	Weehuizen, P. B., M.O. Hol. Lectr.
Page, R. A., M.A. Cape Lectr.	<i>History</i>
<i>Classics</i>	Rousseau, I. J., B.A. Ox. Prof.
Bowles, C. W., M.A. Camb. and Cape (Greek) Prof.	<i>Law</i>
Smail, W. M., M.A. Ox. and Edin., B.A. Lond. (Latin) Prof.	McKerron, G. G., M.A., LL.B. Edin. and Cape Lectr.
<i>Commerce</i>	<i>Mathematics, Pure and Applied</i>
Williamson, J. W. M., C.A. Lectr.	Williams, D., B.Sc. Lond. and Cape Prof.
<i>Drawing and Graphics</i>	Martin, J., M.A. Camb. and Cape Lectr.
Armstrong, F. W., A.R.C.A. (Principal, School of Art) Instr.	Finlay, W. H., M.A. Camb. Lectr.
<i>Dutch</i>	<i>Philosophy</i>
Dingemans, G. F., M.A. Edin. and Cape Prof.	Lord, A. R., M.A. Ox. Prof.
<i>Economics</i> [Lectr.]	<i>Physics</i>
Hall, R. L., B.A. Ox. and Cape	Varder, R. W., M.A. Cape Prof.
<i>Education</i> [Lectr. i/c Dept.]	Watson, S. W., B.A. Camb. and Cape Lectr.
Earle, F. M., B.A., M.Ed.	<i>Zoology</i> [Prof.]
Martinius, Miss M., B.A. Cape Lectr.	Duerden, J. E., M.Sc. Cape, Ph.D. J. Hopk., A.R.C.S. Lond.

3 Instrs.

## GENERAL INFORMATION (v. also pp. 406, 415)

In 1902 a movement was started for the institution of university education in the Eastern Province, and in 1904 the Rhodes Trustees established for the purpose an endowment of £50,000, which, together with a donation of £5000 from the De Beer's Company and local subscriptions amounting to £10,000, was applied to the development of St. Andrew's College (founded 1855). The College Department (opened in 1878) was separated from its school, and incorporated as Rhodes Univ. Coll. in 1904. In 1906 it received £25,000 under the will of Alfred Beit.

**LIBRARY**, 12,000 vols. **LABORATORIES**: Applied Maths., Bot., Chem., Geog., Geol., Phys., Zool.

**COURSES**. B.A., B.Sc., M.A., M.Sc., LL.B., Law Certif., Surveying, Teachers' 1st Class and Lower Secondary Certifs., 1st yr. Medical, 1st B.Sc. in Agric., 1st Mining, 1st Engin., 1st and 2nd B.Com. **FEE** for full degree course, £21 p.a.

**COLLEGE SCHOLARSHIPS** open to graduates: two of £40, one of £50.

**HOSTELS** for 120 men and 100 women. **BOARD AND RESIDENCE**, £60 p.a. inclusive.

**PUBLICATIONS**. *Calendar* (Nov.); *The Rhodian* twice a year.

## THE YEAR 1921-22

**BENEFACTIONS**. Rhodes Trustees, £15,000; Municipalities and Divisional Councils, £1700; Individual donations, £67.

**NEW BUILDINGS**. A new Residence for men and one for women students; also a Dining Hall for women students completed.

**NEW POSTS**. Lecturer in Commerce and Accounts.

**OTHER NEW DEVELOPMENTS**. Practising School on Dalton plan.

**NUMBER OF STUDENTS** (1922). In B.A. and B.Sc. classes 133, including 62 women; B.Com., 2; LL.B., 4; Med., 4; Dent., 3; Survey, 10; Engin., 2; Law Certif., 5; Educn., 20; Theol., 1; Vet. Sc., 1; M.A. and M.Sc., 5.

**DEGREES, ETC., OBTAINED**. M.A. and M.Sc., 3; B.A. and B.Sc., 34; LL.B., 1; Teachers' Diplomas, 14; Survey, 3.

# NATAL UNIVERSITY COLLEGE, PIETERMARITZBURG, NATAL

CHAIRMAN OF COUNCIL—The Hon. Sir JOHN C. DOVE-WILSON.

CHAIRMAN OF SENATE—Prof. WATERHOUSE.

REGISTRAR—D. ROBB.

## PROFESSORS AND LECTURERS, October 1, 1922

<i>Botany</i>		[Prof.	Sweeney, G. W., B.A., LL.B. Cape
Bews, J. W., M.A., D.Sc. Edin.			Lectr.
Aitken, R. D., M.Sc.	Lectr.	<i>French</i>	
<i>Chemistry</i>			Guiton, P. A., B.A. Lond. Lectr.
Denison, R. B., D.Sc. Leeds, M.A.		<i>Geology and Geography</i>	
Cape, Ph.D. Bres.	Prof.	Sayce, R. U., M.A. Wales	Lectr.
Mudie, A. D., M.A., B.Sc. St. And.	Lectr.	<i>History</i>	
<i>Classics</i>			Hattersley, A. F., M.A. Camb. [Lectr.
Petrie, A., M.A. Aberd., B.A.		<i>Law</i>	
Camb.	Prof.	Burchell, F. B., B.A., LL.B. Camb.	Lectr.
<i>Dutch and German</i>		<i>Mathematics</i>	
Besselaar, G., M.A. Cape, D.Litt.			[Prof.
Ghent	Prof.	Roseveare, W. N., M.A. Camb.	
<i>Education</i>		..... (Applied M.)	Lectr.
Ferguson, J. G. W., M.A. Ox. and		<i>Physics</i>	
St. And.	Prof.	Mesham, P., M.Sc. Liv.	Prof.
<i>English and Philosophy</i>		<i>Zoology</i>	
Waterhouse, O., M.A. Manc. Prof.		Warren, E., D.Sc. Lond.	Prof.

## GENERAL INFORMATION (v. also pp. 406, 415)

Established by an Act of 1909, the College was opened in 1910 in the Town Hall and moved in 1912 to its own buildings (which, with equipment, cost £60,000) in the suburb of Scottsville. Students have access to Maritzburg *Botanical Gardens* and *Govt. Museum*.

COURSES are provided leading to the B.A., B.Sc., M.A., M.Sc., etc., 1st examn. for B.Sc. in Agric. (including 1st yr.'s course for Med. students), LL.B., Natal Law Certif. and Natal Advocates' Law examn., Survey examn. (theory only). FEES: Tuition per half-yearly term—ordinary, 10 gs.; Law or single subject, £5.

HOSTEL in grounds for women students.

THE YEAR 1922. Women Students' Hostel (£15,000) and Science Block (£18,000) completed and occupied. Scheme of co-operation with DURBAN TECHNICAL COLLEGE, providing for recognition of work in Engineering, Applied Chem., Maths., and Economics, and transfer to the Univ. Coll. of some members of staff of D.T.C. *Number of Students*: preparing for Degrees or Law or Teachers' Diplomas, 185, including 84 women. *Degrees obtained* (1921): B.A. and B.Sc., 23, and M.Sc., 6.

# THE POTCHEFSTROOM UNIVERSITY COLLEGE, TRANSVAAL

[Returns for 1922 not received]

CHAIRMAN OF COUNCIL—Rev. N. H. v. D. WALT.

PRINCIPAL AND CHAIRMAN OF THE SENATE—

REGISTRAR—W. J. DE KLERK.

## PROFESSORS AND LECTURERS, January 6, 1922

<i>Botany and Zoology</i>		<i>History</i>	
Eiselen, G. T. S., B.A. Cape.	Lectr.	v. d. Walt, A. J. H. J., B.A. (hon.)	Lectr.
<i>Chemistry</i>		<i>Mathematics</i>	
du Plessis, D. J., B.Sc.	Lectr.	Duvenage, A. P. C., M.A. Cape.	Prof.
<i>Classics</i>		<i>Mathematics, Applied, and Physics</i>	
Postma, F., D.Phil. Amst.	Prof.	van Wageningen, G., Cand. Maths.	Prof.
du Plessis, L. J., B.A. (hon.) Cape.	Lectr.	and Phys. Amst.	Prof.
<i>Dutch and French</i>		<i>Pedagogy</i>	
Kamp, J.	Prof.	Prof. Postma (v. Classics).	Prof.
Schulze, H. G., M.A.	Lectr. (also in English).	van Heerden, J. S., M.A.	Lectr.
<i>English</i>		Coetzee, J. C., M.A.	Lectr.
Boshoff, S. P. E., M.A. Amst.	Prof.	<i>Philosophy</i>	
<i>German</i>		van Rooy, J. C., M.A.	Prof.
Kohl, C. G. A.	Lectr.	<i>Theology</i>	
		du Toit, J. D., D.D. Amst.	Prof.
		du Plessis, J. A., B.A. Cape.	Lectr.

## GENERAL INFORMATION (v. also p. 415)

Founded in 1869 as the Literature and Science department of the Theological School of the Reformed Church of S. Africa, this institution became in April 1919 "Het Potchefstroom Universiteits Kollege voor Christelik Hoger Onderwijs," and was in 1921 admitted as a Constituent College of the Univ. of S. Africa under an Act (No. 25) of the Union, whereby the annual subsidy of the Govt. is provisionally limited to the ratio of £1 for £1 and to £4000.

# TRANSVAAL UNIVERSITY COLLEGE, PRETORIA, TRANSVAAL

CHAIRMAN OF COUNCIL—J. E. ADAMSON, M.A., D.Lit. Lond.

VICE-CHAIRMAN—Hon. Justice Sir ARTHUR W. MASON, B.A. Lond.

REGISTRAR—Advocate A. A. ROBERTS, B.A., LL.B. Cape and Camb.

## PROFESSORS AND LECTURERS, November 7, 1922

<i>Accountancy</i>	<i>Commerce</i> , v. also Ac., Geog., Law
Barnes, S. R., A.S.A.A. Sr. Lectr.	Holloway, J. E., B.A. Cape, D.Sc. Lond., <i>Dean of Faculty</i>
<i>Agricultural Botany</i>	Prof. of <i>Economics</i> and E. Hist.
Hector, J. M., B.Sc. Aberd. Prof.	..... (Hist. of C.) Lectr.
<i>Agricultural Chemistry</i>	<i>Dairying</i>
Ross, J. C., B.A. Cape, Ph.D. Illinois Prof.	Davel, H. B., B.Sc. Iowa Lectr.
<i>Agricultural Engineering</i>	<i>Dutch and Afrikaans</i>
van Tonder, A. J., B.A. Cape, M.Sc. Calif., A.C.G.I. Lectr.	Le Roux, T. H., Litt.D. Leid. Prof. Kritzinger, M. S. B., M.A. Lectr.
<i>Agronomy</i>	<i>Economics</i> , v. Comm.
Leppan, H. D., B.Sc. Tor. Prof.	<i>Education</i>
..... Lectr. in Tobacco and Cotton.	Hoogenhout, M. N., M.A. Cape, Ph.D. Stras. Prof.
<i>Animal Husbandry</i>	Bosman, J. C., M.A. Harv. Assoc. Prof.
Bosman, A. M., B.Sc. Tor., <i>Dean</i> of the Faculty Prof.	<i>English</i>
..... Lectr. in Poultry.	Wallis, J. P. R., M.A. Liv. Prof.
..... Lectr. in Sheep & Wool.	Zorn, P. W., B.A. Cape, M.A. Ox., LL.B. Lectr.
<i>Bio-Chemistry</i>	<i>Entomology</i> [Prof.
Green, H. H., D.Sc. Glas. Prof.	Faure, J. C., M.A., B.Sc. Corn.
..... Lectr. in Toxicology.	<i>French and German</i>
Mogg, E., B.A. Camb. Lectr. in Ecology.	de Villiers, W. P., B.A. Cape, Ph. and Litt.D. Ghent Lectr.
<i>Botany</i>	<i>Geography and Econ. Geog.</i>
Wager, H. A., A.R.C.S. Prof.	Plummer, F. E., B.A. Camb. Lectr.
Elbrecht, B., B.A. Lectr.	<i>Geology</i>
<i>Chemistry</i> , v. also Phys. [Prof.	De Villiers, L. C., Ph.D. Freiburg, M.E. Freiburg Prof.
Malherbe, D. F. du T., Ph.D. Halle	
Schilz, W. E., B.Sc. Asst.	

- Greek*  
 Reinink, H., Litt.D. Amst., *Dean of Faculty* Prof.
- Hebrew, v. Latin*
- History*  
 Fouché, L., B.A. Cape, Ph. et Litt.D. Ghent Prof.  
 Agar-Hamilton, J. A., M.A. Cape, B.A., B.Litt. Ox. Sr. Lectr.
- Horticulture* [Lectr.  
 Amundsen, E. O., B.Sc. Calif.
- Latin and Hebrew* [Prof.  
 Paterson, A. C., M.A. Edin. and Ox.  
 Boxwell, J., M.A. (Latin) Lectr.
- Law, v. also Pol. Sc.*  
 Pittman, W., B.A. Cape, M.A. Ox. (Roman, Roman-Dutch, and Merc. L.) Prof.  
 Barry, C., M.A. Ox. (Company L., etc.) Lectr.  
 van Pittius, Adv. J. H. Gey, LL.D. Amst. (Hist. of Roman-Dutch L.) Lectr.
- Mathematics*  
 du Toit, A. E., M.A. Cape Prof.  
 Duminy, J. P., M.A. Cape Tn. Lectr.  
 Brune, O., M.Sc. Stell. Lectr.  
 Kops, C. W., M.A. Cape Lectr.
- Mathematics, Applied* [Lectr.  
 Sherwood, E. T. G., M.A. Camb.
- Philosophy*  
 Macfadyen, W. A., M.A. Ox., LL.D. Cape Prof.  
 Hugo, T. J., B.A. Cape, Ph.D. Gron. Sr. Lectr.
- Physical Chemistry* [Lectr.  
 Tromp, F. J., B.A. Camb., D.Sc.
- Physics and Applied Maths.*  
 Gundry, P. G., Ph.D. Gött., B.Sc. Lond., *Dean of Faculty of Science* Prof.  
 Voss, V., Ph.D. Johns H. Lectr.
- Physiology*  
 Andrews, W. H., D.Sc. Lond., M.R.C.V.S. Prof.
- Political Science, Pub. Admn., and Const. Law*  
 Brookes, E., M.A. Lectr.
- Theology*  
 Greyvenstein, J. H. J. A., B.A. Cape, Th.D. Utr. Prof.  
 Macmillan, E., M.A., B.D. Glas. Lectr.  
 Engelbrecht, S. P., Th.D. Utr. Lectr.  
 Runge, C. H. S., B.A. Ox. Lectr.
- Veterinary Anatomy, v. also Vet. Hy.* [Prof.  
 De Kock, G. v. d. W., M.R.C.V.S., Henning, M. W., M.R.C.V.S. Lectr.
- Vet. Bacteriology*  
 Green, H. H., D.Sc. Glas. Lectr.  
 Robinson, E. M., D.M.V. Berne, M.R.C.V.S. Lectr.
- Vet. Hygiene and Infectious Diseases*  
 Du Toit, P. J., Ph.D. Zür., D.M.V. Berl. (Lectr. in *Embryol.*) Prof.  
 Curson, H. C., M.R.C.V.S. Lectr.  
 Veglia, F., D.V.M. Turin (Helminthology) Lectr.  
 . . . . . (Entomology) Lectr.  
 Fourie, P. J. J., M.R.C.V.S. Lectr.
- Vet. Medicine*  
 Viljoen, P. R., D.M.V. Berne, M.R.C.V.S. Prof.  
 Neser, C. P., D.Sc. Cape, M.R.C.V.S. Sr. Lectr.
- Vet. Pathology*  
 Theiler, Sir A., K.C.M.G., D.Sc. Cape, D.M.V. Berne, *Dean of Faculty of Vet. Sc.* Prof.
- Vet. Surgery and Obstetrics*  
 Quinlan, J. B., D.M.V. Hanover, M.R.C.V.S. Lectr.
- Zoology*  
 Malan, D. E., M.A. Cape, Ph.D. Zür. Prof.  
 Malan, D. J., B.Sc. Asst.

## GENERAL INFORMATION (v. also pp. 406, 415)

In 1908 University Classes in Arts, Science and Law were established at Pretoria by the Transvaal Govt., and were placed under the control of the Council of the Transvaal Univ. College at Johannesburg, the constitution of that body being altered so as to give Pretoria equal representation. A separation took place in 1910, the Johannesburg section being reincorporated as the South African School of Mines and Technology, whilst the Pretoria section retained the name of the Transvaal Univ. College. In 1917 was instituted a Faculty of Agriculture, financial provision for which (an endowment of £100,000) had been made by the last Parliament of the Transvaal in 1910. The following Faculties have since been established: 1918, Theology; 1919, Commerce and Public Administration; 1920, Veterinary Science. The original College Buildings were erected and equipped at a cost of £50,000; those of the Faculty of Agric. at a cost of £100,000; while those of the Faculty of Vet. Science, now in process of erection, involve an expenditure of £150,000.

COURSES are provided for all Degrees and Diplomas of the Univ. in Arts, Science, Agric., Vet. Sc., Law, Div., and Commerce and Public Administration. FEE for full degree course, £20 to £25 p.a.

HOSTELS. 3 for men, including the Dutch and English Church Hostels, and 2 for women. Board and Residence, £60 p.a.

LIBRARY, 11,000 vols. LABORATORIES. Bot., Chem., Geol., Phys., Zool., Agric. Bot., Agric. Chem., Agronomy, Physiol., Vet. Anat.

## THE YEARS 1921-22

NUMBER OF STUDENTS (1921 and 1922). Arts, 170, 185 (women, 62, 42); Science, 83, 90 (women, 27, 24); Law, 74, 64; Commerce and Public Admn., 119, 148 (women, 3, 2); Agr., 34, 30 (women, 4, 5); Educn., 16, 20 (women, 6, 8); Theol., 8, 5; Vet. Sc., 21, 23; Special Subjects, 16, 42; Total, 545, 614 (women, 105, 93).

DEGREES OBTAINED in 1921: B.D., 2; B.A., 27; B.Sc., 9; B.Sc. (Agric.), 6; M.A., 1; M.Sc., 2; LL.B., 2; Dipl.Ed., 5.

# HUGUENOT UNIVERSITY COLLEGE, WELLINGTON, C.P.

PRESIDENT—Miss B. STONEMAN, D.Sc.

## PROFESSORS AND LECTURERS, July 1922

<i>Botany and Philosophy</i> [Prof.	<i>English</i>
Stoneman, Bertha, D.Sc. Corn.	Snell, Florence M., M.A. Oberl.,
Robson, Miss G., B.A.	Ph.D. Yale Prof.
Lectr. in Phil.	<i>French and German</i> [Lectr.
<i>Chemistry</i>	Hansen, Miss C., Ph.D. Heid.
Kilroe, F. C., B.Sc. Lond. Prof.	<i>History</i> [Prof.
<i>Classics</i> [Prof.	Stafford, Susan, M.A. N.U.I.
Sargent, Helen A., M.A. Oberl.	<i>Horticulture</i>
Williams, Marie V., B.A. Prof.	Hebditch, Miss G. L. Lectr.
<i>Domestic Science</i>	<i>Mathematics</i> [Prof.
Mackenzie, Miss L. M., Dipl.	Johnson, Alta M., Ph.B. Neb.
Home Sc. Lond. Lectr.	<i>Philosophy, v. Botany</i>
<i>Dutch</i> [Lectr.	<i>Physics</i> [Lectr.
van de Koppel, Miss L. H., M.A.	Ladler, Miss E. M., B.Sc. Lond.
<i>Education</i> [Prof.	<i>Zoology</i>
de Wet, Miss F. C., M.A. Col., B.A.	Newell, Miss, Ph.D. Lectr.

## GENERAL INFORMATION (v. also pp. 406, 415)

Originally a department of the Huguenot Seminary founded by Dr. Andrew Murray in 1874, the College was incorporated by Act of the Cape Legislature in 1907 as a College for Women and became a constituent College of the Univ. in 1918.

LIBRARY, over 7000 vols. HERBARIUM, over 2000 specimens. LABORATORIES, Bot., Chem., Physics, Zool.

COURSES for B.A., B.Sc., M.A., M.Sc., and 1st Class Teachers' Certif. Special courses in Horticulture.

EXPENSES. Class Fees, £16 per annum. Board at the College Hostel, £44 p.a.

## THE YEAR 1922

BENEFACTION. Municipal Councils, £200.

NEW POST. Lectr. in Domestic Science.

NUMBER OF STUDENTS. Full-time, preparing for Bachelorship, 56, including 7 men. Graduates taking course in Educn., 11; other students, 5 men.

DEGREES OBTAINED. B.A. or B.Sc., 12; Certif. Tr., 8.



# UNIVERSITY OF STELLENBOSCH

CHANCELLOR—Prof. P. J. G. DE Vos, Litt.D.

VICE-CHANCELLOR—Prof. A. MOORREES, Litt.D. S.A.

PRINCIPAL—Prof. G. G. CILLIE, Ph.D. Stras.

REGISTRAR—D. J. ACKERMANN, B.A.

## PROFESSORS, LECTURERS, ETC., August 10, 1922

<i>Agriculture</i> , v. also Vet. [Prof.	
Perold, A. I., Ph.D. Halle, B.A.	Pienaar, E. C., Litt.D. Amst.,
(Oenology and Viticulture)	B.A. (Dutch) Prof.
Neethling, J. H., M.Sc. Corn.	van Niekerk, Lydia, Litt.D. Amst.,
(A. Botany) Prof.	B.A. (Dutch) Prof.
Reinecke, O. S. H., B.S.A. Guelph	Smith, J. J., B.A., Barr.-at-Law
(Fruit-culture) Prof.	(Afrikaans) Prof.
Brain, C. K., M.A. Ohio, D.Sc.	Celliers, J. F. E. (Literature) Prof.
Birm. (Entomology) Prof.	van Huyssteen, J., B.A. Lectr.
Malherbe, I. de V., Ph.D. Mün.,	<i>Economics</i> [Prof.
B.A. (A. Chem.) Prof.	Grosskopf, J. F. W., Dr. Jur. Leid.
Reimers, J. H. W., Emg. Rott.	<i>Education</i> [Prof.
(Animal Husbandry) Prof.	Cillie, G. G., Ph.D. Stras., B.A.
Van der Byl, P. A., M.A., D.Sc.	Pauw, D. A. A., B.A. (Method) Prof.
(Plant Path.) Prof.	Donald, M. M., M.A. Lectr.
Marais, J. S., Ph.D. Illinois	Schröder, Miss A. E. Lectr.
(Agronomy) Lectr.	Cruse, H., Litt.D. Lectr.
<i>Botany</i> [Prof.	Stockenström, E. C., B.A. Lectr.
Nel, G. C., B.A., Ph.D. Berl.	<i>English</i>
Duthie, Miss A. V., M.A. Lectr.	Notcutt, H. C., Ph.D. Lond. Prof.
<i>Chemistry</i>	Mayfield, G. E. T., B.A. Lectr.
van der Merwe, C. D., Ph.D.	Paterson, H. M., M.A. Edin. Lectr.
Halle, B.A. Prof.	Pienaar, W. J. B., B.A. Lectr.
van der Riet, B. de St. J., Ph.D.	<i>French</i>
Halle, M.A. Prof.	Franken, J. L. M., Litt.D. Ghent,
du Toit, D. F., D.Chem. Leid.,	M.A. Lectr.
M.A. Prof.	<i>Geography</i>
Joubert, D. B., Ph.D. M.I.T.,	Serton, P., Litt.D. Utr. Prof.
M.Sc. Lectr.	<i>Geology</i>
Pretorius, G. J., M.Sc. Lectr.	Shand, S. J., Ph.D. Münst., D.Sc.
<i>Classics</i>	St. And. Prof.
van Braam, P., Litt.D. Utr., M.A.	Krige, A. V., M.Sc. Lectr.
(Latin) Prof.	<i>German</i> [Prof.
Edgar, C. S., B.A. Ox., M.A. Edin.	Friedlaender, E., Ph.D. Stras.
(Greek) Prof.	Hoge, J., Ph.D. Stras. Lectr.
Basson, J., Ph.D. Berl., M.A. (C.	<i>Germanic Philology</i> [Prof.
and Classical Philol.) Prof.	Bouman, A. C., Litt.D. Utr.
McCulla, J., M.A. R.U.I. Lectr.	<i>Hebrew</i>
<i>Dutch and Afrikaans</i>	McGregor, A. M., B.A. Ag. Lectr.
Joubert, W. A., Th.D. Amst., B.A.	<i>History</i> [Prof.
(Dutch) Prof.	Blommaert, W., Litt.D. Ghent.

le Roux, Miss M., B.A.	Lectr.	<i>Philosophy, Moral and Polit.</i>	
Gie, S. F. N., Ph.D. Berl., B.A. (H. of S. Africa)	Prof.	Brümmer, N. J., B.D. St. And., M.A.	Prof.
<i>Law</i>	[Prof.]	<i>Physics</i>	[Prof.]
Bodenstein, H. D. J., Barr.-at-Law, LL.D. Leid. (Roman-Dutch L.)		Malherbe, W. E., B.Sc. Edin., B.A.	
Malherbe, W. M. R., Barr.-at-Law, LL.D. Leid.	Prof.	Harvey, S. C., B.A.	Lectr.
van Themaat, H. V. L., LL.D.		Loubser, M. M., B.A.	Lectr.
	Lectr.	<i>Physiology</i>	
<i>Logic and Metaphysics</i>	[Prof.]	Battaerd, P., M.D. Leiden	Prof.
Wilcocks, R. W., Ph.D. Berl., B.A.		<i>Theology</i>	
<i>Mathematics</i>		Moorrees, A., Litt.D.	Prof.
Mackenzie, A. H., M.A. Aberd. and Camb.	Prof.	van Rooyen, E. E., Th.D. Amst., B.A.	Prof.
Stegmann, E. T., B.A., D.Sc. S.A.	Prof.	du Plessis, J., B.A., B.D.	Prof.
		Keet, B. B., Th.D. Amst., M.A.	Prof.
<i>Mathematics, Applied</i>	[Prof.]	<i>Zoology</i>	
Morrison, J. T., M.A., B.Sc. Edin.		.....	Prof.
		Grobelaar, C. S., M.A.	Lectr.

## GENERAL INFORMATION (v. also p. 406)

The Univ. was formally opened on Feb. 28, 1920.

**FACULTIES.** Literature and Philosophy (including also Languages, History, Economics), Maths. and Nat. Sc., Educ., Agric., Theol., Law.

**DEGREES, ETC.** B.A., B.Sc., B.Sc. (Agric.) [4 yrs.' course], B.Educ. (6 months after passing Tr), LL.B. (4 yrs.); obtainable by 1 yr. post-graduate course—M.A., M.Sc., M.Sc. (Agric.). After 2 yrs. [for D.Sc. (Agric.) 1 yr.] of further study and research at the Univ. or other approved place a M.A., M.Sc., or M.Sc. (Agric.) respectively may present a thesis for the Litt.D., or Ph.D., D.Sc., or D.Sc. (Agric.). Similarly a LL.B. may [2 yrs.] present a thesis for the LL.D.

Courses are also provided for the Tr and T2 Teachers' Certifs.

**FEES.** For tuition per semester, £10 (Teaching, £5 to £7: 10s.). Examns., £5 to £30. Hostel, £50 and £56 p.a. Regn. and Library, £2: 5s. p.a.

**PUBLICATION.** *Calendar* (Jan.).

## THE YEAR 1921

**NEW POSTS.** Profs. of Animal Husby., Bot., Entom., German, Ger. Philol., Law, Physiol., Plant Path.; Lectrs. in Agron., Engl. (2), Geol., Law.

**EXTENSION WORK.** Evening lectures by members of staff once a week.

**NUMBER OF STUDENTS** (1921, 1922). Preparing for B.A. or B.Sc. (Pure Sc.), 366, 355, including 80, 48 women; for LL.B., 7, 7; for B.Sc. (Agric.), 21, 29; for M.A. or M.Sc., 14, 19; for Teachers' Certifs., 149, 161 (97, 93 women); others, 47, 40. In 1921, 6 graduates (M.A. or M.Sc.) went to Germany, and 1 to Mass. Inst. Tech., for further study, 4 of them receiving a scholarship of £150 p.a. each for 3 yrs.; in 1922, 5 went to Germany, one with a scholarship of £150 for 3 yrs. In 1921, 35 other students went abroad for further study; in 1922, 25.

**DEGREES CONFERRED.** B.A. and B.Sc., 89; M.A. and M.Sc., 10; B.Sc. Agr., 5.

# UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG, TRANSVAAL

CHANCELLOR—H.R.H. PRINCE ARTHUR OF CONNAUGHT.

VICE-CHANCELLOR—Sir ROBERT KOTZE, B.A.

PRESIDENT OF CONVOCATION—H. J. HOFMEYR, B.A.

CHAIRMAN OF COUNCIL—Sir WM. DALRYMPLE, K.B.E.

PRINCIPAL—JAN H. HOFMEYR, M.A.

REGISTRAR—H. W. J. VAN DER BRUGGE, M.A., LL.B.

## PROFESSORS, LECTURERS, ETC., August 31, 1922

<i>Accounting</i> [Prof.		<i>Classics</i>	
Findlay, J., C.A. Edin., F.S.A.A.		The Principal	Prof.
Eng., I.A., R.P.A. Trans.		Haarhoff, T. J., B.A., B.Litt. Ox.	
Dix, F., B.Com., A.S.A.A. Eng.,			Prof.
R.P.A. Trans.	Lectr.	Wagner, A. I., B.A. Ox. and Cape	
Finlayson, F. W.			Lectr.
	Lectr. in <i>Banking</i> .	Hazell, Miss G. P., M.A. Cape Tn.	
<i>Actuarial Science</i> , v. Maths.			Jr. Lectr.
<i>Anatomy</i>		<i>Dutch and German</i>	
.....	Prof.	Krige, J. D. A., Ph.D. Ghent, M.A.	
Demrs. :		Cape (also Lectr. in German)	Prof.
Edelstein, H. H., M.B. Edin.		<i>Economics, Econ. Hist., and</i>	
Macgregor, A. L., M.B. Edin.		<i>Statistics</i> , v. also Hist.	
Gluckmann, H., M.R.C.S.,		Lehfeldt, R. A., B.A. Camb., D.Sc.	
L.R.C.P.	Hon. Demr.	Lond.	Prof.
<i>Architecture</i>		<i>Education</i> [Prof.	
Pearse, G. E., A.R.I.B.A.	Prof.	Macgregor, W. R., M.A. Aberd.	
<i>Botany</i>		<i>Electro-Technics</i>	
Moss, C. E., M.A. Camb., D.Sc.		Heather, H. J. S., B.A. Ox.,	
Manc., B.Sc. Leeds	Prof.	M.I.C.E., M.I.E.E.,	
Moss, Mrs. M., M.A. Well.	Lectr.	F.Am.I.E.E.	Prof.
Young, Miss E., M.Sc. S.A.		Damant, E. L., B.Sc. Lond. and	
	Jr. Lectr.	S. Afr., A.M.I.E.E. Sr. Lectr.	
<i>Chemistry</i>		<i>Engineering, Mechanical</i>	
Wilkinson, J. A., M.A. Camb.,		Orr, John, O.B.E., B.Sc. Glas.,	
F.C.S. Lond.	Prof.	M.I.C.E., M.I.M.E.,	
Robertson, J. B., M.A., B.Sc.		M.Am.S.C.E., M.Am.S.M.E.	
Edin.	Sr. Lectr.	De Beers Prof.	
George, E., M.Sc. S.A.	Lectr.	Jensen, A. E., B.Sc. Lond. and S.	
Pelling, A. J., B.A. Lond.	Lectr.	Afr.	Sr. Lectr.
Adam, H. R., B.Sc. Aberd., F.I.C.			
Analyt. and Research Chemist.			

Gimkewitz, F., B.Sc. S.A. Sr. Lectr.  
 Drysdale, J., A.M.I.E.S. Jr. Lectr.

*Engineering, Civil*

Charters, R. H., M.I.C.E. Prof.

*English*

Drennan, C. M., M.A. Camb. and  
 Lond. Prof.

Lawrie, J. G., B.A. S.A. Asst.

*French and Romance*

Maingard, L. F., M.A., D.Lit.  
 Lond., L.e.D. Paris. Prof.

Mulligan, Mrs. A. Lectr.

*Geography*

Wellington, J. H., B.A. Camb. and  
 Lond. Sr. Lectr.

*Geology*

Young, R. B., M.A. Glas., D.Sc.  
 Edin. Prof.

Küpferburger, W., M.Sc. Stell.  
 Jr. Lectr.

*Hebrew*

Landau, J. L., Ph.D. Vien., M.A.  
 [Prof.]

*History*

Macmillan, W. M., B.A. Ox. Prof.  
 Hodgson, Miss V. M. L., B.A. Ox.  
 and Cape (also Lectr. in  
 Econ. H.) Lectr.

*Law*

Murray, J. C. Lectr.  
 Schreiner, O. D., B.A. Cape and  
 Camb., LL.B. Camb. Asst.  
 Ramsbottom, W. H., B.A., LL.B.  
 Asst.

*Mathematics*

[Prof.]  
 Dalton, J. P., M.A., D.Sc. St. And.  
 (also Lectr. in Actuarial Sc.)  
 Constançon, C., Dip. Ing. Zür.  
 Sr. Lectr.

Kops, C. W., B.A. Cape (Asst. in  
 Actuarial Sc.) Lectr.

*Maths., Applied*

[Sr. Lectr.]  
 Le May, H., M.A., B.Sc. Glas.

*Metallurgy and Assaying*

Stanley, G. H., A.R.S.M., F.I.C.,  
 M.I.M.E., M.I.M.M. Prof.  
 Millin, D., B.A. Cape, F.I.C.  
 Sr. Lectr.

*Mining and Surveying*

Watermeyer, G. A., B.A. Cape,  
 A.R.S.M. Prof.

*Music*

Kirby, P. R., M.A. Aberd.,  
 A.R.C.M. Prof.

*Philosophy*

[Prof.]  
 MacMurray, J., M.A. Ox. & Glas.  
 Geffen, Mrs. I. A., M.A. S.Afr.  
 Lectr.

*Physics*

Paine, H. H., M.A. Camb., B.Sc.  
 Lond. & Wales Prof.  
 Evans, G. T. R., B.Sc. Wales Lectr.

*Jr. Lectrs. :*

Rosenstein, V., M.Sc. S.A.  
 Ettlinger, B., M.A. Cape

*Physiology*

Cluver, E. H., B.A., D.M. Ox.,  
 B.A. Cape O. Beit. Prof.  
 Stammers, A. D., B.A. Camb.  
 Sr. Lectr.

*Veterinary Anatomy*

[Prof.]  
 Mettam, R. W. M., M.R.C.V.S.

*Zoology*

Fantham, H. B., M.A. Camb.,  
 D.Sc. Lond. Prof.  
 Taylor, Miss E., B.Sc. S.A. Lectr.

*Medicine* (for subjects of first  
 2 yrs.—Anat., etc., v. *supra*)

*Gynaecology* [Prof.]  
 Grant, W. Gordon, M.D. Aberd.

*Medicine*

Williamson, O. K., M.A., M.D.  
 Camb., F.R.C.P. Lond. Prof.  
 Watt, A., M.B., C.M., F.R.C.S.  
 Edin. Tutor.

*Clin. Lectrs. :*

Baumann, E. P., M.D. Edin.  
 Bensusan, A., M.D. Brux.,  
 M.R.C.S., L.R.C.P.

*Obstetrics*

McGibbon, J., M.B., F.R.C.P.  
 Edin. Prof.

*Path. & Bacteriology* [Hon. Prof.]  
 Watkins - Pitchford, W., M.D.  
 Lond., D.P.H. Ox., F.R.C.S.

Becker, J. G., M.B. Glas., D.P.H., D.T.M. Liv. Sr. Lectr.	<i>Surgery</i> Thomson, G. Ritchie, M.B., Ch.M. F.R.C.S. Edin. Prof.
Pirie, J. H. H., B.Sc., M.D., F.R.C.P. Edin. Sr. Lectr.	Levin, J. J., M.B. Edin. Tutor.
Porter, Annie, D.Sc. Lond. Lectr. in Parasitology.	Mudd, F. B., M.R.C.S., L.R.C.P. Lectr. in Anæsth.
<i>Pharmacology</i>	Clin. Lectrs. : Welchman, W., M.B., B.S. Lond., F.R.C.S.
Watt, J. M., M.B. Edin. Prof.	Beyers, C. F., M.B., B.S. Lond., F.R.C.S.
Crawford, J., M.P.S. S.Afr. Instr.	

## GENERAL INFORMATION (v. also p. 406)

Telegraphic address—University, Johannesburg.

The TRANSVAAL TECHNICAL INSTITUTE, constituted in 1903, was opened in 1904 and took over at Johannesburg the work of the S. AFRICAN SCHOOL OF MINES, KIMBERLEY, which had been founded in 1896. In 1906 its name was changed to "TRANSVAAL UNIVERSITY COLLEGE," and in 1908 Arts and Science classes at Pretoria were placed under its control. This arrangement was terminated in 1910, when the Johannesburg part of the institution was incorporated under the name of the S. African School of Mines and Technology. Buildings, towards the cost of which the Council of Education, Witwatersrand, contributed £60,000 and Govt. £30,000, were opened in March 1909. In March 1917 classes in Arts, Pure Science, and Medicine were inaugurated. In Sept. 1920 the institution became the "University College, Johannesburg." In 1921 the College was reincorporated as a University with effect from March 1, 1922. LIBRARIES. Seymour Memorial, 11,000 vols., and several departmental. MUSEUM with good Geol. collection.

FACULTIES: Arts, Sc., Comm., Engin., Law, Med. DEGREE COURSES: B.A. or B.Sc., 3 (Hons., 4) yrs.; M.A. or M.Sc., 1 yr.; LL.B. (post-grad.), B.Com., or B.Econ., 3 yrs.; B.Mus., B.Sc. (Eng.), B.Arch., or M.B., B.Ch., 4 yrs. OTHER COURSES: for Teachers' Certifs., Dipl. Archt., Law Certif., Civil Service Law examn., Land Surv., Dent. (Prelim. subjects), Vet. Sc. (first 2 yrs.); Evening Classes at Johannesburg and elsewhere in Tech. and other subjects. FEES from 12 gs. p.a. (Civil Service Law) to £35 (M.B.).

SCHOLARSHIPS open to Graduates: Chamber of Mines, £250; Union, 2 of £150 each for 3 yrs.; Ainsworth (Mod. Hist.) every 2 yrs., £150 p.a. for 2 yrs.

RESIDENCE. Hostels for 150 men and 35 women. Fees, £60 p.a.

PUBLICATIONS. *Calendar*; *Students' Magazine* (S.R.C.).

THE YEAR 1922. The Univ. College, Johannesburg, became the Univ. of the Witwatersrand on March 1, 1922. At the first Graduation ceremony on Oct. 4, Hon. degrees were conferred on General the Rt. Hon. J. C. Smuts (LL.D.) and T. Reunert (D.Litt.). An addl. Lectr. in Classics, new Lectrs. in French and Philos., and Clinical Lectrs. in Med. and Surg. were appointed. A University Press was established. In conjunction with the Transvaal W.E.A. a Discussion Circle was started, out of which it is hoped that Tutorial Classes will grow. *Number of Students*: Full-time, 638 (including 198 women). Part-time, preparing for Bachelorship, 175 (31 women); for Diplomas, 150 (23 w.). Occasional, 21 (16 w.). *Resignations*: J. L. Stewart, E. P. Stibbe, B. Sampson, J. Sandground.

# UNIVERSITY OF MALTA

VISITOR—H.E. THE GOVERNOR OF MALTA.

PRESIDENT OF THE GENERAL COUNCIL AND RECTOR—Prof. T. ZAMMIT, C.M.G., M.D., Hon. D.Litt. Ox.

SECRETARY—A. F. SCIORTINO.

## PROFESSORS, LECTURERS, ETC., November 1922

<i>Anatomy and Histology</i>	<i>Mechanics, Applied, and Drawing</i>
Busuttil, R., M.A., M.D. Prof.	Gatt, J. L., L.S. and A. Prof.
Briffa, J., B.Sc., M.D. Asst. Prof.	<i>Medicine and Surgery, v. infra</i>
<i>Biology, v. Nat. Hist.</i>	<i>Natural History</i>
<i>Chemistry</i>	Borg, John, M.A., M.D. Prof.
Sultana, A., M.D. Prof.	<i>Philosophy, v. Logic</i>
Borg, S., M.D. Demr. in Expl. Sc.	<i>Physics</i>
<i>Engineering and Architecture</i>	Agius, T., M.A., M.D. Prof.
Galea, R. V., L.S. & A. (also Lectr. in Descr. Geom. and Arch. Drawing) Prof.	Borg, S., M.D. Demr. in Expl. Sc.
<i>English Literature</i>	<i>Physiology and Pathology</i>
Shepherd, E. R. Prof.	Samut, R., M.B., C.M. Edin. Prof.
<i>Latin and Italian Literature</i>	<i>Political Economy</i>
Bartoli, A. Prof.	Sultana, A., LL.D. Prof.
<i>Law</i>	<i>Theology</i>
Vassallo, Most Rev. Can. E., Jur. Can. Doc. (Canon L.) Prof.	Formosa, Mgr. G., B.A., D.D., J.U.D. Prof. of Dogm. T.
Mallia, C., B.Litt., LL.D. (Comm. L.) Prof.	Grima, Mgr. Can. C., D.D. Prof. of Moral T.
Vassallo, E. C., M.A., LL.D. (Const. and Internat. L.) Prof.	Gonzi, M., B.Litt., J.C.D., D.D. Prof. in Holy Script. and Hebrew.
Randon, L. A., M.A., LL.D. (Crim. & Natural L.) Prof.	<b>Medicine</b>
Bartolo, A., B.Litt., LL.D., M.L.A. (Hist. of Legislatn.) Prof.	<i>Forensic M. and Toxicology</i>
Frendo, P. G., LL.D., M.L.A. (Fiscal Laws, Statistics and Admn.) Prof.	Uilo Xuereb, G. (v. Mental) Prof.
<i>Logic and Philosophy</i>	<i>Hygiene and Preventive M.</i>
Cuschieri, Very Rev. A., O.C. Prof.	Bernard, A. V., M.B.E., M.D. Prof.
<i>Mathematics and Pract. Engin.</i>	<i>Materia M., Pharmacy and Therap.</i>
Nixon, W. F., B.Sc. Lond., A.R.C.Sc. Prof.	Cassar, I., M.D. Prof.
	<i>Medicine</i>
	Mifsud, C. Sen, M.D. Prof.
	Debono, S., M.D. Asst. Prof.

<i>Mental Diseases</i>		<i>Ophthalmology</i>	
Ullo Xuereb, G., M.D.	Prof.	Vassallo, A., M.A., M.D.	Prof.
<i>Midwifery and Gynæcology</i>		<i>Pathology, v. Physiology</i>	
Debono, G., M.D.	Prof.	<i>Surgery</i>	
.....	Asst. Prof.	Cassar, S., M.D.	Prof.
		Borg, F., B.Sc., M.D.	Asst. Prof.

## GENERAL INFORMATION

Founded in 1769 by Grand-Master Fra Emmanuel Pinto de Fonçeca of the Order of St. John under the authority of Pope Clement XIV., the University is lodged in a building erected by the Jesuit Fathers in 1591-93 for a College, whilst its Medical Faculty originated in a School of Anatomy founded in 1674 by Grand-Master Nicola Cottoner in the Great Hospital of the Order which accommodated 745 patients. The authorities of the University as reconstituted by a Govt. Statute of 1921 are the Visitor, the Rector, the General Council (comprising the Rector, six Professors, and three members elected by Convocation), six Faculty Councils, and Convocation.

**LIBRARY**, 5000 vols. A public library maintained in connexion with the Univ. contains over 100,000 vols. and is rich in MSS. and rare editions of great historical interest. **MUSEUMS**: Nat. Hist. and Archæol. **OBSERVATORY**, full meteorol. equipment and seismograph. **BOTANICAL GARDEN**. **HOSPITALS**, available for Clinics: general (240 beds) and several special; Leper Asylum (100); lunatic (700); aged poor (700).

**FACULTIES**: Literature, Science, Engineering and Architecture, Theology, Law, Medicine.

**MATRICULATION** involves passing an examn. in 5 subjects, including English, Italian, Maths., and, except for Engineering courses, Latin; for Med. students proposing to register in England, 6 subjects, including also Hist.

**DEGREES, ETC.** B.A., B.Sc., B.E. and A., M.D., LL.D., D.D., B.L. Can. Diplomas of Notary Public, Legal Procurator, Pharmacist and Apothecary, Dental Surgeon, Midwife.

**SCHOLARSHIPS FOR GRADUATES.** £120, one each in Theol., Law, Engin., two in Med. (Travelling Scholps.). £50, one each in Theol., Law, Med. One of £120 awarded every 6 years in the faculty of Med.

## THE YEAR 1921-22

**NUMBER OF STUDENTS**: Full-time, preparing for B.Litt., 9; B.Sc., 23; B.Eng. and Arch., 5; Dipl. in Pharm., 6; Dipl. in Leg. Proc., 5; D.D., 10; LL.D., 36; M.D., 50; others, 15.

**DEGREES CONFERRED.** D.D., 6; LL.D., 19; M.D., 22; B.Eng. and Arch., 4; B.L.Can., 6; B.Litt., 6; B.Sc., 2. Diplomas: Dent. Surg., 1; Pharm. and Apoth., 3; Midwife, 3.

**RETIREMENT.** J. Ellul, M.D., Asst. Prof.

# THE UNIVERSITIES OF INDIA

UNIVERSITIES were first established in British India as a result of the great parliamentary inquiry into the condition of India which preceded the confirmation of the Company's Charter in 1853. It was resolved to create a properly articulated system of education from the Primary School to the Univ. The London Univ., at that time a purely examining body, which admitted to its tests only the students trained in affiliated institutions—the latest device of educational statesmanship—was taken as a model. "It had been suggested, in London, by conditions which resembled those of Bengal. . . . Its defects were not yet apparent, though it was to be profoundly modified by London itself four years later. It had the advantage of costing very little. It enabled all the existing collegiate institutions, whether Government or missionary, to be worked into the same scheme, and promised to provide a quite impartial mode of testing the qualifications of students for Government service. Above all, it gave freedom to the non-Government Colleges—all, at that date, mission colleges—to carry on their work in their own way, and offered them help from public funds for the secular side of their work" (*Report of the Calcutta Univ. Commission*, 1917-19). In pursuance of this policy, Univs. were founded in 1857 at Calcutta, Bombay, and Madras. The framers of the policy, while contemplating that the ordinary subjects of study should be dealt with by the Colleges, did not intend that the Univs. should have no teaching functions, but in point of fact they have until recently concerned themselves solely with examinations. In 1882 and 1887 the Univs. of the Panjab and Allahabad were established on similar lines. A Commission was appointed in 1902 to examine the working of the system, and the Univs. Act of 1904 was designed to give effect to its recommendations as to reorganization of the government of the Univs., their assumption of teaching functions, and more effective supervision by them of the Colleges as well as more exacting conditions of affiliation. Univ. Professorships, Readerships, and Lectureships have accordingly been constituted in the above-named Univs., but mainly for advanced (post-graduate) courses and, except in Calcutta, only on a very small scale. Benares (Hindu), Mysore, and Patna Univs. were established in 1916 and 1917. The foundation, structure, and working of institutions for higher education in India have been subjected to exhaustive re-examination by the Calcutta Univ. Commission, 1917-19. In the Univ. of Calcutta itself but little progress has been made towards giving effect to the far-reaching and fundamental changes recommended by this body, but their recommendations have to a great extent determined the lines on which were established in 1920 and the two following years the unitary, teaching, and residential Univs. of Aligarh, Dacca, Delhi, Lucknow, Rangoon, and the Osmania Univ. of Hyderabad, Deccan, and on which the Univ. of Allahabad was re-organized in 1921.

The following summary account of Univ. constitutions, examns., affiliation, and degrees relates to the five older Univs., but is no longer fully applicable to Allahabad.



**CONSTITUTION.** Under the Act of 1904 the SENATE, comprising the (official) Chancellor, the Vice-Chancellor, and Fellows (and, in Calcutta, the Rector) constitute the Body Corporate of the Univ., the executive government being vested in a SYNDICATE of from 9 to 17 members including the Vice-Chancellor and Director(s) of Public Instruction and members (largely College teachers) elected by the Senate or the Faculties. The constitution and abolition of FACULTIES rests with the Senate.

**ADMISSION TO EXAMINATIONS.** Save on the recommendation of the Syndicate, by special order of the Senate, and subject to any regulations made in this behalf, no person may be admitted to any except the Matriculation examn. unless he produces a certificate from a College *affiliated* to the Univ. to the effect that he has completed the prescribed course.

Applications for AFFILIATION are submitted by the Syndicate. If satisfied as to the managing agency, teaching staff, provision for residence of students, equipment, financial resources, suitability of fees, etc., to Government. If granted, the courses in respect of which the College is affiliated are specified. Affiliated Colleges must comply with requisitions by the Syndicate for information, submit themselves to inspection under the Syndicate's orders, and take such action as may be ordered consequent upon such inspections.

**TERMS.** Bombay divides the academic year into two terms, June-Oct., Nov.-March; elsewhere Colleges make such arrangements as they find convenient. Univ. examns. are for the most part held in the spring.

**DEGREE COURSES.** In *Arts and Science* a 2 yrs.' course leading to an Intermediate examn. is followed by a further 2 yrs.' course for the Degree. English is a compulsory subject. Madras gives a B.A. Honours degree requiring an additional year of study.

**Law.** The LL.B. (or B.L.) course covers 2 yrs. after graduating in Arts or Science.

**Medicine.** The M.B. and B.S. course covers 5 yrs., starting from the Intermediate examn. in Arts or Science or (Bom. and Calc.) 6 yrs. from Matricn.

**Teaching.** The B.T. (All. and Mad.—L.T.) courses cover 1 yr. after graduating in Arts or Science. Calc. gives a L.T. obtainable by 2 yrs. of study after passing the Intern. examn. in Arts or Sc. Bombay requires either 3 yrs.' experience or 2 terms at a Training College after graduation *plus* 1 yr.'s experience thereafter.

**Engineering.** For the B.E. Bombay gives a 3 yrs.', Calc. and Mad. a 4 yrs.', course.

**HIGHER DEGREES.** The M.A. or M.Sc. can be taken by bachelors of 2 yrs.' standing; the D.Litt. of All. and D.Phil. of Calc. by M.A. of 3 yrs.' standing; the D.Lit. or D.Sc. of Panj. by M.A. or M.Sc. after 2 yrs. of further advanced study; the D.Sc. of All. by M.Sc. after 1 yr. of further study; the D.Sc. of Calc. by M.Sc. of 3 yrs.' standing.

The LL.M. of All. and Bom., the M.L. of Mad., and the LL.B. (Hons.) of Panj. may be taken by LL.B. or B.L. of 2 yrs.' standing, the M.L. of Calc. at any time after taking the B.L. The LL.D. (or D.L.) is open to LL.M. (or M.L.) after 5 yrs. (Calc. 1 yr.) of practice.

The M.D. (and in Calc. M.O.) can be taken by medical graduates

after experience (Luck. and Panj. 4 yrs., Calc. and Mad. 3 yrs., Bom. 5 yrs.) in the practice of their profession or hospital practice (Luck. and Panj. 2 or 3 yrs., Mad. and Calc. 1 or 2 yrs., Bom. 1 or 2 yrs., in addition to professional practice). The M.S. qualifications are similar, but in Calcutta both hospl. and professional practice are required.

**STATUS OF THE NEW UNIVERSITIES.** The Univs. of Aligarh, Benares, Dacca, Delhi, Lucknow, Patna, and Rangoon have been incorporated by acts of the Indian Legislature, and their degrees and examns. are recognized by the Govt. of India to be equal in value to those of the older Univs. for the purpose of admission to public services. The Mysore and Osmania Univs. were established by local legislation in Indian States, and are not within the jurisdiction of the Govt. of India. The degrees of Mysore have been recognized by the Univs. of Bombay, Calcutta, and Madras, and by the Govt. of India. Osmania degrees had not, up to June 1922, been recognized by other Indian Univs. Professor Karve's scheme for an Indian Univ. for women with headquarters at Poona proposes to organize there and, through affiliated institutions, elsewhere, instruction through the Indian vernacular languages adapted to the special needs of women. It is on entirely independent lines and seeks no recognition or aid from Govt.

**NUMBER OF STUDENTS** in March 1921 in the 228 Arts and Professional Colleges was 61,324, including 1009 women.

**RESIDENCE.** One of the recommendations of the Commission of 1902 was that much closer attention should be given to the conditions under which students live and work, and very large sums have since been spent in providing hostels and otherwise improving the conditions of student life. In 1920-21 some 20,000 students (including 800 women) of Arts and Professional Colleges were accommodated in hostels or boarding-houses.

**CONFERENCES.** In April 1920 a Committee was formed for drafting an outline of the functions and constitution of an Asscn. of Indian Univs. The project was further advanced at the Congress of Universities of the British Empire at Oxford in July 1921, but has not yet been realized. A conference of Principals of Engineering Colleges in India was held in July 1921 to discuss matters connected with training and recruitment and post-graduate training or higher specialized courses for Engineers. A Central Advisory Board of Education has been formed. Its advice will be at the disposal of the Local Govts., but its establishment implies no kind of interference with the control of education which is administratively a provincial subject. The Educational Commissioner with the Govt. of India is chairman of the board.

**INDIAN STUDENTS AT THE HOME UNIVERSITIES.** In view of the difficulties which have been experienced by Indian students coming to the United Kingdom, an organization has been established by Government for their assistance. This organization is under the control of the High Commissioner for India, and consists of an Indian Students' Department at 42 Grosvenor Gardens, S.W.1, in charge of two Joint Secretaries to the High Commissioner for Indian Students' work, N. C. Sen, O.B.E., and Thomas Quayle, D.Lit., M.A., assisted by R. M. J. Knaster, B.A., and V. I. Gaster, B.A. There is also a hostel at 21

Cromwell Rd., S. Kensington, S.W.7, under the control of the Department (Warden, R. M. J. Knaster). There are Local Advisers to Indian Students at Manchester, Edinburgh, and Glasgow, and eleven Advisory Committees in India (Allahabad—Sec., R. K. Sorabji, M.A., Barr.-at-Law ; Ajmere—Sec., L. P. Watkins, Mayo College ; Bombay—Sec., Prof. F. M. Dastur, M.A., Univ. Buildings ; Calcutta—Sec., Prof. J. C. Coyajee, B.A., LL.B., 7 College Sq. ; Dacca—Sec., Prof. B. N. Das, M.A., B.Sc. ; Delhi—Sec., S. K. Rudra, M.A., Principal, St. Stephen's College ; Gauhati—Sec., J. Borooah, Barr.-at-Law ; Lâhore—Sec., Kunwar Dalip Singh, B.A., Barr.-at-Law ; Madras—Sec., A. Davies, M.A., Barr.-at-Law, Principal, Law College ; Nagpur—Sec., S. R. Pandit, M.A., LL.B., Barr.-at-Law ; and Patna—S. N. Sahay, B.Sc., B.A., Barr.-at-Law).

The Indian Students' Department at 42 Grosvenor Gardens comprises a bureau for the supply of information on educational matters, and the Jt. Secs. act as guardians to Indian Students when requested by the parents in India. A pamphlet, giving a detailed account of the house at 21 Cromwell Road, which serves as a centre and meeting-place for Indian students in London and a temporary residence for new arrivals, can be obtained from the Warden, or from the Advisory Committees in India, and a *Handbook of Information on the Educational Facilities of the United Kingdom* was published by the Department in Dec. 1922.

The posts of Local Adviser to Indian students in Oxford and Cambridge were abolished in 1916, and were replaced by a Secretary to the Delegacy for Oriental Students at Oxford, and a Secretary to the Inter-Collegiate Indian Students Committee at Cambridge. These gentlemen are Univ. officers, and are in no way under the control of the High Commissioner for India.

Lord Lytton's Committee on Indian Students published their report in 1922 (H.M. Stationery Office, pp. 518 ; price 5s.).

# ALIGARH MUSLIM UNIVERSITY

LORD RECTOR—THE GOVERNOR-GENERAL OF INDIA.

CHANCELLOR—HER HIGHNESS NAWAB SULTAN JEHAN BEGUM OF  
BHOPAL, G.C.S.I., G.C.I.E., C.I., G.B.E.

PRO-CHANCELLOR—HIS HIGHNESS AGA SIR SULTAN MOHAMED SHAH  
AGA KHAN, G.C.S.I., G.C.I.E.

VICE-CHANCELLOR—RAJA SIR MOHAMED ALI MOHAMED KHAN, KHAN  
BAHADUR, K.C.S.I., K.C.I.E.

PRO-VICE-CHANCELLOR—ZIA-UD-DIN AHMAD, C.I.E., M.A. Camb.,  
D.Sc. All., Ph.D. Gött.

TREASURER—NAWAB SYED MAHOMED ALI.

LIBRARIAN—ABUL HASAN, Barr.-at-Law.

## TEACHING STAFF, July 1922

<i>Arabic</i>		<i>History and Polit. Sc.</i>	
Tritton, A. S., M.A. Ox., D.Litt.	.....		Prof.
Edin.	Prof.	Haleem, A. B. A., B.A. Ox.	
1 Reader, 1 Lectr.			Reader.
		1 Lectr.	
<i>Chemistry</i>		<i>Islamic Studies</i>	
Haider Khan, M., B.A. Camb. and		Ashraf, M. S.	Reader.*
All., B.Sc. Lond.	Prof.	1 Lectr.	
Bukhsh, A., M.A., B.Sc. All.			
	Reader.*		
1 Lectr., 1 Demr.		<i>Law</i>	
		Ali Naqi, Syed, B.A.	Reader.*
<i>Economics</i>		1 Reader, 1 Lectr.	
Hyder, L. K., B.A. All. and		<i>Mathematics</i>	
Camb., Ph.D. Heid.	Prof.	The Pro-Vice-Chancellor	Prof.
1 Lectr.		Kureishy, A. M., M.A.	Reader.*
		1 Lectr.	
<i>English</i>		<i>Persian</i>	
Moss, F. J., M.A. Camb.	Prof.		[Reader.*
.....	Prof.	Khan, Hamid-uddin, M.A. All.	
Dickinson, E. C., B.A. Ox.	Prof.		
1 Reader, 1 Lectr. and Tutor.		<i>Philosophy</i>	
		Sharif, M. M., B.A. Camb.	Prof.
<i>Geography</i>		1 Lectr.	
Dunn, E. W., M.A. Ox.	Prof.		

\* Chairman of Dept.

<i>Physics</i>		Husain, S. U. M. Abbas (Shia)	
.....	Prof.		Prof.*
Murad, F. D., B.A., M.Sc. Panj.		<i>Sanskrit</i>	
	Reader.*	Sarup Shastri, Pandit Ram	Lectr.
1 Lectr. and Tutor, 1 Demr.		<i>Urdu</i>	[Reader.*
<i>Theology</i>		Sajjad Hyder, Syed, B.A.	
Ansari, A. (Sunni)	Dean.*	1 Lectr.	

## GENERAL INFORMATION (v. also p. 434)

The Mahomedan Anglo-Oriental College, founded in 1875, became, under the Aligarh Muslim University Act of 1920, a unitary residential University, with Univ. School and Intermediate College attached as separate institutions. Although it is chiefly Muslim, and special attention is paid to Muslim Theology, it is open to all, without distinction of sex, race, creed, or class. In the grounds, comprising several square miles, are halls and hostels sufficient for the accommodation of all the students and some of the staff. LIBRARY, 21,000 vols. LABORATORIES. Physics and Chem.

COURSES. For students who have passed the Intermediate examn. of an Indian Univ.: two-year courses for the B.A. or B.Sc. Courses leading to M.A., M.Sc., and LL.B. degrees are also provided. FEES: for Tuition, Rs. 8 to Rs. 15 p.m.; Board and Residence about Rs. 20 p.m.

\* Chairman of Dept.

# UNIVERSITY OF ALLAHABAD

PATRON—THE GOVERNOR-GENERAL OF INDIA

CHANCELLOR—THE GOVERNOR OF THE UNITED PROVINCES.

VICE-CHANCELLOR AND CHAIRMAN OF THE SYNDICATE—SIR CLAUDE F.  
DE LA FOSSE, M.A., C.I.E.

REGISTRAR—M. G. V. COLE, M.A.

## HEADS OF DEPARTMENTS, October 1922

<i>Arabic and Persian</i>		<i>History</i>	[Prof.]
Ali Nami, Syed Mohammad,		Khan, S. Ahmad, M.A., Litt.D.	
M.A.	Lectr.	<i>Law</i>	[Prof.]
<i>Botany</i>		Weir, Dr. J. C., B.A., LL.D. Dub.	
Mitter, J. H., M.A. Cal., B.Sc.		<i>Mathematics</i>	
Panj.	Reader.	Moody, R. H., M.A. Aberd.	Prof.
<i>Chemistry</i>		<i>Philosophy</i>	
Dhar, N. R., M.Sc. Cal., D.Sc.		Burrell, P. S., M.A. Ox.	Prof.
Lond.	Prof.	<i>Physics</i>	[Reader.]
<i>Economics and Commerce</i>		Salig Ram Bhargava, M.Sc.	
Burnett-Hurst, A. R., B.Sc.		<i>Sanskrit</i>	
Lond., F.S.S.	Prof.	Acharya, P. K., M.A., Ph.D.,	
		D.Litt.	Prof.
<i>English</i>		<i>Zoology</i>	[Reader.]
Dunn, S. G., M.A. Ox.	Prof.	Bhattacharya, D. R., M.Sc.	

## GENERAL INFORMATION (v. also p. 434)

Founded in 1887, the Univ. concerned itself mainly with examinations, having no teaching staff (except that of its School of Law) until 1914. Thereafter it established Chairs and Readerships, etc., for research work in Economics and Modern History for graduate students. Now it is forming itself into a Teaching Univ.

LIBRARY, 22,000 vols. MUSEUM in connexion with Economics Dept.

FACULTIES. Arts, Science, Law, Commerce.

DEGREES, ETC. B.A., M.A., D.Litt.; B.Sc., M.Sc., D.Sc.; LL.B., LL.M., LL.D.; L.T. (Teaching); Commerce Diploma.

RECOGNITION OF OTHER UNIVS. The examns. of Bom., Calc., Mad., Panj., Patna, and Benares, the Ox. and Camb. Senior Local, and Lond. Matricn. examns. are recognized.

SCHOLARSHIPS FOR GRADUATES. Emp. Vict. Research Readership, Rs. 100 p.m. (3 yrs.) for M.Sc.; one of Rs. 100 and 3 of Rs. 50 for Research under Univ. Profs.

RECOGNIZED HOSTELS. 9 at Allahabad and Agra.

PUBLICATIONS. *Calendar*, Rs. 5; *Arts, Sc., and Law Examns. Prospectus*, R. 0.6.0. *Journal of Economics*, Rs. 12 p.a.; *Journal of History*, Rs. 9 p.a.; *Univ. Retrospect*.

## AFFILIATED INSTITUTIONS RECOGNIZED IN DEGREE COURSES

[M.A., etc. = affiliated up to M.A., etc., standard.]

AGRA COLLEGE. M.A.; M.Sc., except in Bot.; B.Sc. in Bot.; I.L.B. Principal and Prof. of *Engl. Lit.*—T. Cuthbertson Jones, B.A. Lond. Other Profs.: *Arabic and Pers.*—Syed Mohd. Ibn Ibrahim, M.A. *Biol.*—Karam Chand Mehta, M.Sc. *Chem.*—H. Krall, B.A., B.Sc. Dub.; B. L. Vaish, M.Sc. *Econ.*—Lokendra Nath Ghosh, M.A. *Hist.*—A. Brookes, M.A. Camb. *Law*—Nilmani Dhar, B.A., B.L. *Maths.*—Ekanath Banerji, M.A., B.Sc. *Phys.*—S. P. Prasad, B.Sc. Cal.; Satish K. Mukerji, M.Sc. *Sansk.*—Krishna Lal Misra, M.A. *Zool.*—H. S. Seth, M.Sc. 25 Lectrs. and Demrs.

AGRA, *St. John's College*. M.A., except in Econ.; M.Sc. in Maths.; B.Sc.; and in Commerce. Under the general control of the Church Missionary Soc. Admits non-Christians, but is especially for Christians. Principal, and Prof. of *Engl.*—A. W. Davies, M.A. Ox. Vice-Principal, and Prof. of *Philos.*—T. D. Sully, B.A. Ox. Other Profs.: *Commerce*—L. Steele, F.I.A. Lond. *Engl. Lit.*—R. Grinham, B.A. Ox.; C. F. Walbank, B.A. Camb. *Maths.*—C. Chaturvedi, M.A., B.Sc. *Philos. and Logic*—H. Mark, M.A. 31 Asst. Profs., etc.

AJMER, *Govt. College*. B.A.; B.Sc. in Maths., Phys., Chem. Principal—A. Miller, M.A. St. And. 11 Profs., etc.

ALLAHABAD, *Ewing Christian College*. M.A. in Philos. and Econ.; B.Sc. American Presb. Mission. Principal, and Prof. of *Engl.*—C. A. R. Janvier, M.A., D.D. Vice-Principal, and Prof. of *Engl.*—N. C. Mukerji, M.A. Calc. Other Profs.: *Biol.*—W. S. Dudgeon, Ph.D. 23 other Profs., etc.

ALLAHABAD, *Kayastha Pathshala*. B.A. in Engl., Maths., Hist., Pers., Sansk. and (provisionally) Econ. Principal—B. Sanjiva Rao, M.A. Camb. 13 other Profs., etc.

ALLAHABAD, *Government Training College*. L.T. Principal—J. L. Watson, M.A. Edin. Vice-Principal—A. A. Simpson, M.A. Aberd. Head of Practising School—B. L. Agarwala, M.A. Other Teachers: W. G. P. Wall, M.Sc. Manc.; K. C. Bhattacharya, M.Sc., L.T.; 4 others.

AMRAOTI, *King Edward College*. B.A. in Engl., Sansk., Hist., Philos., Econ., and Maths. Principal—.....

BAREILLY COLLEGE. B.A. Principal—J. H. Maxwell, M.A. Glas. 9 other Teachers.

BENARES, *Queen's College*. M.A. except in Econ.; B.Sc. in Phys., Chem., and Maths. A Govt. Institn. Principal—P. S. Burrell, M.A. Ox. Profs.: *Arabic*—Himayal-ul-Hasan, B.A. *Engl. and Hist.*—H. N. Randle, M.A. Ox. *Maths.*—M. Khurshed Ahmed, M.Sc. *Philos.*—C. M. Mulvany, M.A., B.Lit. Ox. *Sansk.*—Lakshman Sastri; V. J. Antani, M.A. 2 Profs. in Science.

CAWNPORE, *Christ Church College*. M.A. except in Econ. Controlled by the Lucknow Diocesan Board of Missions and a Managing Committee. Prin-

cipal, and Prof. of *Engl.*—M. S. Douglas, M.A. Camb. Vice-Principal, and Prof. of *Philos.*—S. C. Chatterji, M.A. Panj. 7 other Profs., etc.

CAWNPORE, *Dayanand Anglo-Vedic College*. Provisionally from July 1919, B.A. in *Engl.*, *Maths.*, *Hist.*, *Econ.*, *Philos.*, *Sansk.*, *Pers.*; *Commerce*. Principal—Dewan Chand, M.A. 11 other Profs.

GORAKHPUR, *St. Andrew's College*. B.A. in *Engl.*, *Hist.*, *Maths.*, *Philos.*, *Pers.*, and *Sansk.* Principal—A. C. Pelly, M.A. Camb. 10 Profs., etc.

GWALIOR, *Victoria College*. B.A.; B.Sc. in *Maths.*, *Phys.*, *Chem.* Entirely supported by the State. Principal—H. F. Manley, M.A. Camb. 17 Profs., etc.

INDORE, *Christian College*. M.A. in *Philos.* Principal—R. A. King, M.A. Manit. Other Profs.: *Engl. and Econ.*—H. W. Lyons, B.A. Toronto. *Engl. and Philos.*—A. A. Scott, B.A. Tor. 6 other Profs.

INDORE, *Holkar College*. B.A.; B.Sc. in *Maths.*, *Phys.*, *Chem.* Maintained by the State. Principal—S. L. Gokhale, M.A. Cal. 15 Profs.

JABALPUR, *Robertson College*. B.A.; B.Sc. in *Maths.*, *Phys.*, *Chem.* Principal—A. C. Sells, M.A. Ox. 17 Profs. and Demrs.

JABALPUR, *Training College*. L.T. A Govt. Institn. Principal—R. McGavin Spence, M.A. Edin. Profs.—Satish Chandra Ghoshal, B.A., B.Sc., LL.B.; Gangadhar Govind Kanetkar, M.A.; Sheoram Hari Gokhale, M.A.; L. S. Jha.

JAIPUR, *Maharaja's College*. M.A. except in *Econ.*; B.Sc. in *Maths.*, *Phys.*, *Chem.* Maintained by the State. Principal (Dir. of Pub. Instrn.)—N. K. Ray, B.A. Cal. *Engl. and Philos.*—M. R. Oak, M.A. Panj. Profs.: *Arabic*—Altaf Husain, Maulvi Alim. *Econ.*—Vithal Vaman Tamhankar, B.A. *Maths.*—Manmohan Lal Mathur, B.Sc. *Pers.*—Mohammed Baqa, Munshi Fazil. *Engl.*—Parbati C. Mukerji, M.A. *Sansk.*—S. N. Acharya. 6 Asst. Profs., etc.

JODHPUR, *Jaswant College*. B.A. Principal—Pandit Suraj Prakash, M.A. 7 Profs.

MEERUT, *Meerut College*. B.A.; B.Sc. in *Maths.*, *Phys.*, *Chem.*; LL.B.; and in *Commerce*. Principal—W. Jesse, M.A. Camb. Prof. of *Law*—Gurcharan Das, B.A., LL.B.; B. N. Mithal, B.Sc., LL.B. 15 other Profs., etc.

MUSSOORIE, *Woodstock College* (for European and Anglo-Indian Girls). B.A. in *Latin*, *French*, and *Hist.* Principal—Rev. U. E. Parker, B.D. Ohio (U.S.A.). 4 Profs., etc.

NAGPUR, *Hislop College*. M.A. in *Engl.*, *Philos.*, *Sansk.*, *Pers.*, *Hist.*, *Maths.*, and *Econ.*; B.Sc. (teaching in Vict. Coll.). Principal, and Prof. of *Hist. and Engl.*—T. W. Gardiner, M.A. Camb. Prof. of *Engl. and Hist.*—J. S. Hoyland, M.A. Camb. *Maths.*—G. K. Garde, M.A. *Philos. and Logic*—J. Brenner, M.A. Aberd. *Sansk.*—G. K. Kher, B.A. *Econ.*—J. S. Prentice, M.A. Queen's (Canada). 7 other Profs., etc.

NAGPUR, *Morris College*. M.A. in *Engl.*, *Philos.*, *Maths.*, *Sansk.*, *Pers.*, *Econ.*, and *Hist.*; B.Sc. in *Maths.*, *Phys.*, *Chem.* (teaching in Vict. Coll.); LL.B. Principal, and Prof. of *Hist.*—F. P. Tostevin, M.A. Ox. Other Profs.: *Econ.*—A. C. Sen Gupta, M.A. Edin. *Engl. and Hist.*—F. M. Cheshire, B.A. Camb. *Law*—G. P. Dick, Barr.-at-Law; P. S. Kotwal, B.A. Ox.; J. C. Ghose, B.A., B.L. Cal.; A. V. Wazzalwar, B.A., LL.M. *Maths.*—S. P.



Banerji, M.A. *Pers.*—M. A. Ghani, M.A. *Philos.*—J. B. Raju, B.Sc. Ox., M.A. *Sansk.*—Rampratap Shastri. 9 other Profs., etc.

NAGPUR, *Victoria College of Science.* D.Sc. in Phys. and Chem. Maintained by Govt. Principal, and Prof. of *Chem.*—R. H. Beckett, B.Sc. Lond. Prof. of *Phys.*—M. Owen, M.Sc. Wales. 4 Assts.

## THE YEAR 1921-22

**BENEFACTIONS.** Govt. Grants, Rs. 50,000 for Library; Rs. 14,824 for Chair of Civics and Politics; Rs. 31,500 for pay of Vice-Chancellor.

**CHANGES IN REGULATIONS.** Intermediate and B.A. students failing in one subject and obtaining 40 p.c. marks of aggregate permitted to appear in that subject only; similar concession for candidates for Commercial Diploma. Restriction of age removed for all examns. Private candidates can appear for B.A. 2 (instead of 3) years after passing Intern. examn.

**NEW AFFILIATIONS.** St. John's Coll., Agra, up to M.A. in Econ.; King Edward Coll., Amraoti, up to B.A.

**OTHER IMPORTANT EVENTS.** Under the Allahabad Univ. Act of 1921 new authorities—Court, Executive Council, etc.—were constituted, and a whole-time paid Vice-Chancellor was appointed. The Muir Central College, controlled by Govt., was transferred to the Univ. The buildings occupied by the College now accommodate the Science Depts. of the Univ., classes for Arts and Law Depts. being held in buildings occupied by Library and Univ. School of Law and a new building acquired for the purpose. The M.A.O. Coll., Aligarh, was transferred to the Muslim Univ., and some of the other Mofassil Colls. are giving up the Degree Teaching and are becoming Intermediate Colleges.

**NUMBER OF STUDENTS** examined in 1922. B.A. and B.Sc., 1091; LL.B. (Pre. and Final), 855; L.T., 112; M.A. and M.Sc. (Pre. and Final), 358; Comml. Diploma, 60.

**DEGREES CONFERRED** in 1922. B.A., 311; B.Sc., 112; LL.B., 305; L.T., 78; M.A., 89; M.Sc., 16.

# BENARES HINDU UNIVERSITY

LORD RECTOR—THE GOVERNOR-GENERAL OF INDIA, *ex officio*.

VISITOR—THE GOVERNOR OF THE UNITED PROVINCES, *ex officio*.

CHANCELLOR—THE MAHARAJAH OF BARODA.

PRO-CHANCELLOR—THE MAHARAJAH OF BIKANER.

VICE-CHANCELLOR—PANDIT MADAN MOHAN MALAVIYA, B.A., LL.B.

PRO-VICE-CHANCELLOR AND SECRETARY OF THE COURT AND THE  
COUNCIL—PRINCIPAL A. B. DHURVA, M.A., LL.B.

TREASURER—HON. RAJA MOTI CHAND SAHEB, C.I.E.

REGISTRAR—PROFESSOR SYAMA CHARAN DE, M.A.

On April 1, 1916, a teaching and residential Hindu University was incorporated "for the purposes, among others, of making provision for imparting education, literary, artistic, and scientific, as well as agricultural, technical, commercial, and professional, of furthering the prosecution of original research, and of giving instruction in Hindu theology and religion, and of promoting the study of literature, art, philosophy, history, medicine, and science, and of imparting physical and moral training."

The University began to function on Oct. 1, 1917, when it became responsible for the maintenance of the Central Hindu College, Benares. Colleges of Oriental Learning and Theology, and a Training College were opened in July and Aug. 1918, a College of Engineering in 1919. The Univ.'s assets, including perpetual grants by the Govt. of India and by Ruling Chiefs of Rs. 1,00,000 and 75,000 respectively, are valued at Rs. 1,80,00,000.

Every member of the *Court*, the supreme governing body, must be a Hindu.\* It includes representatives of benefactors, graduates, the Senate, the Jain and Sikh communities, Hindu religion and Sanskrit learning, the learned professions. Of the *Senate*, the academic body, at least three-fourths must be Hindus; it includes (1) the Chancellor, Pro-Chancellor, Vice-Chancellor, Pro-Vice-Chancellor, Univ. Profs., and Principals or Heads of Colleges as *ex-officio* members; (2) 5 members nominated by the Visitor; (3) elected members, including representatives of the Court, of Hindu religion and Sanskrit learning, and graduates. The *Council* and *Syndicate* are the executive bodies of the Court and Senate respectively.

LABORATORIES: Chem., Physics, Zool., Bot., Geol. The Engineering College laboratories include shop equipped for manufacturing machines, smith and paint shops, iron and brass foundry, and motor-car repair shop; a power-house is also attached to the College.

ADMISSION. The Univ. is, subject to regns., open to persons of all classes, creeds, and castes, but provision is made for religious instruction (which is compulsory for Hindu students) and examination in the Hindu religion only. Women are eligible for admission to the Univ. and examns., degrees, etc.

FACULTIES. Oriental Learning, Theology, Arts, Science—Pure and Applied, Law.

\* An exception was made in the case of Dr. Annie Besant.

**DEGREES.** B.A., M.A., D.Litt., B.Sc., B.Sc. in Appl. Sc. (Engin.), M.Sc., D.Sc., Shastri, Shastracharya, Smritiratna, Smritisagara, Dharmashastry, Dharmacharya, LL.B., LL.M., LL.D., L.T. The minimum qualification for Degree course (5 yrs.) in Engin. is Interim. Sc. examn. of an Indian Univ., with Maths., Phys., and Chem. as optional subjects.

**RESIDENCE.** Students are required to live in a Univ. or College Hostel, or, subject to the approval of the Pro-Vice-Chancellor, with parents or guardians. There are 3 hostels accommodating 1000 students and 84 residences for members of the staff.

**SCHOLARSHIPS.** 76 for Arts and Science students of merit, 40 for Teachers' Training College. Numerous other College Scholps.

**DEGREES** were conferred in 1922 as follows : B.A., 95 ; M.A., 17 ; B.Sc., 33 ; M.Sc., 6 ; L.T., 51 ; Shastri, 6.

## COLLEGES MAINTAINED BY THE UNIVERSITY

**CENTRAL HINDU COLLEGE.** Principal (Univ. Prof. of Sansk.)—A. B. Dhruva, M.A., LL.B. Honorary Univ. Profs. : Sir P. C. Roy, Kt., C.I.E., D.Sc. (Chem.) ; Nil Ratan Dhar, M.A., D.Sc. (Phys. Chem.) ; C. V. Raman, M.A. (Phys.) ; B. Keightley, M.A. (Philos.) ; P. K. Telang, M.A., LL.B. (Hist.) ; N. C. Nag, M.A., F.I.C. (Chem.) ; V. G. Kale, M.A., and H. R. Batheja, M.A. (Econ.). Other Univ. Profs. : G. Prasad, M.A., D.Sc. (Maths.) ; N. P. Gandhi, M.A., B.Sc., A.R.S.M., A.I.M.M., F.G.S. (Mining & Met.) ; K. R. Gunjkar, B.A. Camb., B.Sc. (Phys.) ; S. S. Bhatnagar, Ph.D. (Chem.) ; K. K. Mathur, B.Sc. (Geol.) ; R. S. Inamdar, B.A. Camb. (Biol.). Lectrs. in *Biol.*—H. R. Mehra, M.Sc. ; N. K. Tewari, M.Sc. ; H. C. Ahuja, M.Sc. ; Y. Bharadwaj, M.Sc. ; S. C. Varma, M.Sc. ; Chandrabal, B.Sc. *Chem.*—M. B. Rane, M.A. ; S. K. Basu, M.Sc. ; N. N. Godbole, M.A., B.Sc. ; P. S. Varma, M.Sc. ; D. N. Banerji, M.Sc. ; P. N. Roy, M.Sc. ; A. T. Mazumdar, M.Sc. *Econ.*—H. L. Chabiani, M.A. ; Gurmukh Singh, M.Sc. ; G. C. Varma, M.A. *Engl.*—P. Seshadri, M.A. ; B. Banerji, M.A. ; K. Prasad, M.A., Barr.-at-Law ; M. M. Desai, M.A. ; J. S. Yajnic, M.A., LL.B. ; S. N. Lal, M.A. *Hist.*—K. C. Chatterji, M.A. ; S. N. Bhattacharya, M.A. ; G. P. Mehta, M.A. ; J. N. Prasad, M.A. ; B. C. Bhattacharya, M.A. *Maths.*—P. Prasad, M.A., B.Sc. ; S. Pande, M.Sc. ; H. N. Datta, M.A. ; Gorakh Prasad, M.Sc. *Pers.*—Mirza M. M. Husain. *Philos.*—P. B. Adhikari, M.A. ; A. C. Mukerji, M.A. ; I. Tewari, M.A. ; G. P. Ganguli, M.A. *Phys.*—P. K. Dutt, M.A. ; N. K. Sethi, D.Sc. ; U. S. Asrani, M.Sc. ; N. K. Pande, B.Sc. ; C. M. Sogani, M.Sc. ; P. C. Ghose, M.Sc. ; K. L. Tewari, B.Sc. *Religion*—P. N. Patankar, M.A. (also in Marathi) ; H. R. Pande, B.A. *Sansk.*—N. Bhattacharya, M.A. ; R. Prasad-Shastri ; B. Nath, M.A. *Hindi*—S. S. Das, B.A., and 2 others. *Bengali*—Harihar-Shastri.

**COLLEGES OF ORIENTAL LEARNING AND THEOLOGY.** Principals : O. L.—..... ; Theol.—Pandit Prabhu Datta Agnihotri. 17 other Profs.

**TEACHERS' TRAINING COLLEGE.** Principal, Pandit C. M. Sukul, M.A., L.T. 3 Assts.

**ENGINEERING COLLEGE.** Principal and Prof. of Mech. E.—C. A. King, B.Sc., A.R.C.Sc. Other Profs. : L. D. Couselant, B.Sc., B. C. Chatterji, B.A., B.Sc., B.L., A.M.I.E.E. ; R. S. Jain, B.Sc., A.M.I.E.E. ; R. D. Gulatti, B.Sc. 6 Asst. Profs. and a Demr. Arrangements were made in 1922 for holding at the College examns. of the City and Guilds of London Institute.

*Agricultural Farm and Dairy.* Supt.—R. K. Apte, B.Agr.

# UNIVERSITY OF BOMBAY

CHANCELLOR—THE GOVERNOR OF BOMBAY.

VICE-CHANCELLOR AND CHAIRMAN OF THE SYNDICATE—Sir CHIMANLAL  
H. SETALVAD, Kt., B.A., LL.B., LL.D.

REGISTRAR—KHAN BAHADUR FARDUNJI M. DASTUR, M.A.

## GENERAL INFORMATION (v. also p. 434)

Founded in 1857, the Univ. has concerned itself mainly with examinations and maintained no teaching staff until 1913. Since then it has provided annually lectures for post-graduate students in scientific and literary subjects. In 1919 it established a School of Economics and Sociology.

LIBRARY (established 1864, owing to Premchund Roychund Benefaction, Rs. 4,00,000), 24,000 vols., including Fawcett Collection (Econ.).

FACULTIES. Arts, Science (including Agric. and Engin.), Law, Medicine.

DEGREES. B.A., M.A.; B.Sc., M.Sc.; B.Com.; LL.B., LL.M.; M.B., B.S.; B.Hy., M.D., D.Hy., M.S.; B.Ag., B.E. (Civ., Mech., Elec.), M.C.E.

RECOGNITION of examns. of other Univs.; Interm. Arts and Sc. examns. of other Indian Univs. and London.

FEEs for Univ. post-grad. courses, Rs. 5 each.

RESIDENCE. Board and lodging at Colleges generally from Rs. 40 to Rs. 70 p.m.

SCHOLARSHIPS FOR GRADUATES. In Sanskrit, Bhugwandass Purshotundass, Rs. 514; Law, Sir Mangaldas Nathubai, Rs. 1000 p.a. for 3 yrs.; Travelling Fellowship, Rs. 700 p.a. for 3 yrs. for Hindus; Technical educn. in England for Hindus, Rs. 2000 p.a. for 3 yrs.; Springer Research Scholp. Lectureships: Wilson Philological, Rs. 750 (6 cold weather lectures); Bhagranlal Indrajī, Rs. 1000 (6 lectures on Indian Epig., etc.).

INSPECTION OF SCHOOLS applying for recognition for purposes of the School-Leaving examn. is arranged for by the Joint Examn. Board.

PUBLICATION. *Calendar* (March); vol. i. Rs. 3, vol. ii. (examn. pp.) R. 2.

## UNIVERSITY SCHOOL OF ECONOMICS & SOCIOLOGY

Director and Professor of Sociology and Civics—Patrick Geddes. Asst. Prof.—S. N. Pherwani, M.A.

Prof. of Economics—K. T. Shah, B.A., B.Sc. Lond. Asst. Prof.—C. N. Vakīl, M.A., M.Sc. Lond.

## AFFILIATED INSTITUTIONS RECOGNIZED IN DEGREE COURSES

**AHMEDABAD, Gujarat Coll. (Govt.).** In Arts. Principal—W. G. Robertson, M.A., B.D. Aberd. Profs.: *Bot.*—W. T. Saxton, M.A. Camb. *Chem.*—D. D. Kanga, M.A. *Engl. and Logic*—B. N. Seal, B.A. Camb. *French*—P. L. Charlier, B.A. *Hist.*—M. S. Commissariat, M.A. *Maths.*—S. M. Shah, M.A. *Physics*—V. B. Divatia, B.A. Camb., M.A. *Sansk.*—K. V. Abhyankar, M.A. 14 other Lectrs., etc.

**BARODA, State College.** In Arts; in Science for B.Sc. Principal—A. B. Clarke, B.A. Camb. Profs.: *Biol.*—S. V. Sheode, B.Sc. *Chem.*—K. G. Naik, M.A., M.Sc. *Engl.*—The Principal; S. L. Joshi, A.M. Col.; A. X. Soares, M.A., LL.B. *Hist. and Pol. Econ.*—K. H. Kamdar, M.A. *Logic and Mor. Philos.*—A. K. Trivedi, M.A., LL.B. *Maths.*—Gajanan G. Pendse, M.A.; B. Sengupta, M.A. Calc., B.L. *Pers.*—Syed Nawab Ali, M.A. *Phys.*—S. G. Burrow, B.Sc. Lond. *Sansk.*—Bhaster R. Arte, M.A. *Phil.*—A. G. Widgey, M.A. Camb. 6 other Lectrs., etc.

**BHAVNAGAR, Samaldas State College.** In B.A. courses. Principal, and Prof. of *Sansk.*—J. J. Kania, B.A. 8 other Profs., etc.

**BOMBAY, Elphinstone Coll. (Govt.).** In Arts; in Science for B.Sc. Principal, and Prof. of *Engl. Lit.*—A. L. Covernton, M.A. Ox. Other Profs.: *Engl.*—C. J. Sisson, M.A. Edin. (on leave). *French*—L. Peltier, B.A., B.Sc. Paris. *Hist. and Pol. Econ.*—A. C. Farran, B.A. Dub. (on leave); G. B. Jathar, B.A. Camb., M.A. Edin. (acting). *Logic and Mor. Philos.*—R. Mairs, M.A. Ox. (on deputation); J. C. P. D'Andrade, M.A. (acting). *Maths.*—D. D. Kapadia, M.A., B.Sc. *Pers.*—A. K. S. Shaikh, M.A. *Sansk.*—A. B. Gajendruzadkar, M.A. *Chem.*—A. N. Meldrum, D.Sc. Aberd., Principal, Roy. Sc. Inst. *Physics*—G. R. Paranjpye, M.Sc. 18 other Lectrs., etc.

**BOMBAY, Grant Medical College (Govt.).** In Med. and in B.Sc. courses. Dean of the College—Major B. Higham, M.B., I.M.S. Other Profs.: *Anat.*—Y. G. Nadgir, M.S. *Bact.*—D. A. Turkhud, M.B., C.M. *Biol. and Med. Jurispr.*—W. Nunan, M.D., Acting. *Chemistry*—The Dean of the College. *Mat. Med. and Pharm.*—Lt.-Col. E. F. G. Tucker, M.B., B.S., M.R.C.P. Lond., I.M.S.; S. K. Engineer. *Midw. and Dis. of Women and Children*—Major A. F. Hamilton. *Operative Surg.*—Lt.-Col. T. S. Novis, F.R.C.S., I.M.S. *Ophth.*—Major G. McPherson, M.A., M.B., C.M., I.M.S. *Phys.*—J. A. D'Souza, B.A., L.M., and S. *Physiol., Histol., and Hygiene*—Capt. S. L. Bhatia. *Surg.*—A. K. Dalal, F.R.C.S. 8 others.

**BOMBAY, Government Law School.** In Law. Principal, and Prof. of *Jurispr.*—B. J. Wadia, M.A., LL.B., Barr.-at-Law. Other Profs.: N. M. Patwardhan, Barr.-at-Law; P. W. Kane, M.A., LL.M.; W. B. Pradhan, B.A., LL.B.; Mirza A. Khan, M.A.; Y. N. Nadkarni, B.A., LL.B.; R. S. Bilimoria, Barr.-at-Law; P. B. Vachha, B.A., LL.B.; H. M. Mehta, B.A., Barr.-at-Law; P. L. Thacker, B.A., LL.B.; V. S. Bhandarkar, LL.B.; B. K. Dhurandkar, LL.B.

**BOMBAY, St. Xavier's College (S.J.).** In Arts; in Science for B.Sc. Principal, and Prof. of *Botany and Zool.*—E. Blatter. Other Profs.: *Biol.*—J. P. Mullan, M.A. *Chem.*—J. F. Caius; S. S. Dastur, M.A.; R. N. Bhagwat, M.A., B.Sc. *Engl. Lit.*—J. Devine. *French Lit.*—N. H. Jhabvala, B.A. *Hist. and Econ.*—S. N. Haji, B.A. Ox. *Hist. and Logic*—A. Soares, M.A.; C. D. Pinto, M.A. *Logic*—F. B. Vachha, B.A. Ox. *Maths.*—A. A. Engineer,

M.A. Camb. *Phys.*—A. Steichen ; K. V. Joshi, M.A. *Sansk.*—R. Zimmermann ; S. R. Dharadhar, M.A. 12 Lectrs.

**BOMBAY, Wilson College** (U.F. Church of Scotland). In Arts ; in Science for B.Sc. Principal, and Prof. of *Engl. and Philos.*—J. McKenzie, M.A., D.D., LL.D. Aberd. Other Profs. : *Biol.*—Vinayak N. Hate, B.Sc. *Chem.*—A. R. Normand, M.A., B.Sc. Edin. ; A. E. Walden, B.Sc. *Econ.*—J. Kellock, M.A., B.D. *Engl. Lit.*—E. A. Parker, M.A. *French*—V. G. Rao, B.A., LL.B. *Hist., Engl., Lat.*—R. Strachan, M.A., B.D. Aberd. *Maths.*—J. McLean, M.A., B.Sc. Aberd. *Pers.*—M. Ahmed, M.A. *Calc. Philos. and Hist.*—P. A. Wadia, M.A. *Phys.*—H. R. Hamley, M.A., B.Sc. ; D. B. Naik, M.A., B.Sc., LL.B. *Sansk.*—Hari D. Velankar, M.A. 12 Asst. Profs.

**BOMBAY, Cama and Allbless Hospitals.** In Midwifery courses for the M.D.

**BOMBAY, Sydenham College of Commerce and Economics.** In Arts for B.Com. Principal, and Prof. of *Econ. and Econ. Hist.*—M. L. Tannan, B.Com. Birm. 7 Profs.

**BOMBAY, Municipal Laboratory.** In Chem. courses for the B.Hy. examn.

**DHARWAR, Government Karnatak College.** In Arts ; in Science for B.Sc. Principal, and Prof. of *Engl.*—H. G. Rawlinson, M.A. Camb. Other Profs. : *Engl. and Philos.*—H. V. Hampton, M.A. Dub. *Engl. and Hist.*—N. S. Takakhav, M.A. *Econ.*—S. G. Beri, M.A. *Sansk.*—V. G. Bhat, B.A. Camb. ; R. G. Bhadkamkar, M.A. *Maths.*—C. P. Saldanha, M.A. *Logic and Philos.*—A. D. Dhopeshwarkar, M.A., LL.B. 7 Lectrs.

**JUNAGADH, Bahauddin College.** In Arts. Principal, and Prof. of *Engl. Hist., and Pol. Econ.*—S. H. Hodivala, M.A. Other Profs. : *Engl.*—K. L. Oza, M.A. *French*—C. F. Saldanha, M.A. *Logic and Mor. Philos.*—Harilal M. Bhatt, M.A. *Maths.*—Narayan B. Pendse, M.A., LL.B. *Pers.*—Aga Abdul Rahimkhan. *Sansk.*—Mahadev M. Joshi, M.A. *Science*—Vasudev S. Ghurye, M.A. 5 Lectrs.

**KARACHI, Dayaram Jethmal Sind College.** In Arts ; in Science for B.Sc. Principal, and Prof. of *Engl.*—S. C. Shahani, M.A. Other Profs. : *Biol.*—M. G. Punvani, B.A., M.B. *Engl.*—T. M. Advani, M.A., LL.B. *Engin.*—Motiram H. Advani, L.C.E. *Hist.*—D. T. Mariwalla, M.A. *Philos.*—G. G. Kewalramani, M.A., LL.B. *Maths.*—T. P. Trivedi, M.A., LL.B. *Pers.*—Hotchand M. Gurbaxani, M.A. *Phys. and Chem.*—Suratram B. Butani, M.A., B.Sc. *Sansk.*—Hari Laxman Lagu, B.A. 5 other Teachers.

**KOLHAPUR, Rajaram College** (State). Principal, and Prof. of *Hist. and Econ.*—Balkrishna, M.A. Panj., Ph.D. Lond. 13 other Profs., etc.

**POONA, Deccan Government College.** In Arts. Principal, and Prof. of *Maths.*—A. C. L. Wilkinson, M.A. Other Profs. : *Engl.*—H. G. D. Turnbull, M.A. Ox. ; H. Hamill, B.A. Belf. *Hist. and Econ.*—B. K. Thakore, M.A. ; R. P. Patwardhan, B.A. Ox. *Logic*—Shankar Gopal Sathe, M.A. *Pers.*—N. D. Minocherhomji, B.A. *Sansk.*—S. K. Belvalkar, Ph.D. Harv., M.A. 7 other Teachers.

**POONA, Fergusson College.** In Arts ; in Science for B.Sc. Under the control of the Deccan Educn. Soc. Principal, and Prof. of *Physics*—K. R. Kanitkar, M.A., B.Sc. Other Profs. : *Bot. and Zool.*—Dhundiraj L. Dixit, B.A. *Chem.*—G. B. Kolhatker, M.A. *Engl. and Sansk.*—V. G. Paranjpe, M.A., LL.B. *Engl.*—Ganesh H. Kelker, B.A. Camb., M.A. *German*—Krishnaji K. Joshi, M.A., Ph.D. Würz. *Hist. and Pol. Econ.*—Hon. Vaman G. Kale, M.A. *Hist.*—S. R. Kanitkar, M.A. ; V. N. Kumbhare, M.A. *Logic, etc.*—V. K. Joag, M.A. *Maths.*—V. B. Naik, M.A. *Pali*—Dharmanand Kaushambi. *Pers.*—

Mahomedkhan Munshi. *Philos.*—N. G. Damle, M.A. *Phys. and Chem.*—Mahadeo K. Joshi, M.A. *Sansk.-Shastri*—Wasudeo S. Abhyankar. 15 other Teachers.

POONA, *Government Agricultural College*. In B.Ag. courses. Principal, and Prof. of *Agric.*—J. B. Knight, M.Sc. Mass. *Bot.*—W. Burns, D.Sc. Edin. *Chem. and Geol.*—D. L. Sahasrabuddhe, M.Sc., M.Ag. *Mycology*—S. L. Ajreikar, B.A. Camb. *Entom.*—R. S. Kasargode, B.Sc. 18 other Teachers.

POONA, *Government College of Engineering*. In Engin. and in B.Sc. courses. Principal, and Prof. of *Mech. Engin.*—R. S. Cree Brown, B.Sc., A.M.I.C.E. Other Profs.: *Chem.*—R. J. Patwardhan, M.A. *Civil Engin.*—N. N. Ayyanger, L.C.E. *Elec. Engin.*—Shiv Narayan, B.E., M.A., B.Sc. *Engin.*—C. Graham Smith, A.M.I.C.E. *Geol.*—G. G. Narke, M.A. Calc., M.Sc. Manc. *Mech. Engin.*—Kirpal Singh, B.Sc. Lond. 11 other Teachers.

POONA, *New Poona College*. In Arts. Under control of Shikshana Prasarak Mandal. Principal, and Prof. of *Phys. and Maths.*—N. M. Shah, M.A. Camb. Other Profs.: *Econ. and Maths.*—R. P. Sabnis, M.A. Camb. *Engl. and Sansk.*—R. D. Karmarkar, M.A. *Engl.*—R. K. Lagu, M.A. *Philos.*—N. G. Naralkar, M.A. *Hist.*—G. P. Patwardhan, M.A. 10 other Teachers.

SANGLI, *Willingdon College*. In Arts. Under control of the Deccan Educn. Society. Principal, and Prof. of *Logic and Moral Philos.*—G. C. Bhate, M.A. 8 other Profs.

SURAT, *Sarvajanik College*. In Arts. Under control of Gujarat Educn. Soc. Principal, and Prof. of *Engl.*—V. K. Rajvade, M.A. 15 other Profs.

## THE YEAR 1921-22

BENEFACTIONS. For Prince of Wales Gold Medal and Fellowship, at the M.D. or M.S. degree, Rs. 25,000; for Scholarships—Sir W. Wedderburn, in History at M.A., Rs. 12,300; Bai Jaiji P. Lalkaka for a girl at Intern. Arts Examn., Rs. 10,000.

CHANGES IN REGULATIONS. Option for candidates at B.A. and M.A. examns. to answer in vernacular questions on the vernacular languages except a question on translation. A system of examn. by compartments not applicable to School-Leaving examn. and examns. for the Masters' or Doctors' degrees (candidate who fails in one or more subjects but at same time secures in others a prescribed high percentage of marks is exempted from subsequent examn. in these; if he fails in one subject only but secures fixed higher percentage in all others, he is allowed to keep terms generally for next higher examn. and to appear for it, but must pass in the remaining subject of lower examn. held either in previous or in same examn. season).

NEW AFFILIATION. Willingdon College, Sangli.

NUMBER OF STUDENTS who presented themselves for degree examns. and (in brackets) those who took degrees: B.A., 1166 (706); LL.B., 454 (292); M.B., B.S., 289 (136); B.Com., 57 (28); B.Sc., 177 (62); B.Ag., 47 (22); B.E., 68 (32); Higher degrees, 75 (24).

# UNIVERSITY OF CALCUTTA

CHANCELLOR—THE GOVERNOR OF BENGAL.

VICE-CHANCELLOR AND CHAIRMAN OF THE SYNDICATE—The Hon.

Sir ASUTOSH MOOKERJEE, Kt., C.S.I., M.A., D.L., D.Sc., Ph.D.

REGISTRAR—J. C. GHOSH, M.A.

CONTROLLER OF EXAMINATIONS—RAI BAHADUR A. C. BOSE, M.A.

INSPECTOR OF COLLEGES—H. C. MOOKERJEE, M.A., Ph.D.

## UNIVERSITY PROFESSORS, September 22, 1922

*Agriculture* [G. P. Singh Prof.  
Ganguli, N. N., B.Sc. III.

*Art : Indian Fine Arts*  
Tagore, A. N., C.I.E., D.Litt.  
Bageswari Prof.

*Botany*  
Agharkar, S. P., M.A., Ph.D.  
Sir R. B. Ghosh Prof.  
Brühl, P. J., D.Sc., I.S.O., F.C.S.,  
F.G.S. Prof.

*Chemistry*  
Ray, Sir P. C., Kt., C.I.E., D.Sc.,  
Ph.D., F.C.S. Palit. Prof.  
Mitter, P. C., M.A., Ph.D. Berl.  
Sir R. B. Ghosh Prof.  
Sen, H. K., M.A., D.Sc. Lond.  
Sir R. B. Ghosh Prof. of  
Applied C.  
Mookerjee, J. N., D.Sc. Lond.  
G. P. Singh Prof.

*Economics* [Minto Prof.  
Banerjee, P. N., M.A., D.Sc. Lond.

*English* [Prof.  
Stephen, H., M.A., D.D., Ph.D.

*History and Culture, Ancient  
Indian*  
Bhandarkar, D. R., M.A.  
Carmichael Prof.

*Law* [Tagore Prof.  
Garner, J. W., M.A., Ph.D.

*Mathematics*  
Cullis, C. E., M.A., Ph.D., D.Sc.  
(Higher M.) Hardinge Prof.  
Mookerjee, S. D., M.A., Ph.D.  
Prof.

Sen, N., D.Sc. (Applied M.)  
Sir R. B. Ghosh Prof.  
*Mental and Moral Science*  
Radhakrishnan, S., M.A.

George V. Prof.  
Halder, H. L., M.A., Ph.D.  
Prof.

*Philology, Comparative*  
Taraporewala, I. J. S., B.A.,  
Ph.D. Prof.

*Phonetics*  
Chatterjee, S. K., M.A., D.Litt.  
G. P. Singh Prof.

*Physics* [Palit. Prof.  
Raman, C. V., M.A., D.Sc.  
Bose, D. M., M.A., Ph.D.

Sir R. B. Ghosh Prof.  
Ghosh, Phanindranath, M.A.  
Ph.D.

Sir R. B. Ghosh Prof. of  
Applied P.

Saha, M. N., D.Sc.  
G. P. Singh Prof.

*Zoology*  
Mitra, K., B.A. Prof.



UNIVERSITY LECTURERS. 13, of whom 4 are Univ. Extension Lectrs.

POST-GRADUATE TEACHERS IN ARTS. *Economics*, 17; *English*, 20; *History*, including *History and Culture*, *Ancient Indian*, 43; *Indian Vernaculars*, 21; *Mathematics*, *Pure*, 12; *Pali*, 12; *Persian and Arabic*, 7; *Philology*, *Comp.*, 3; *Philosophy*, 16; *Psychology*, *Expl.*, 8; *Sanskrit*, 22; *Anthropology*, 8; *Commerce*, 14.

POST-GRADUATE TEACHERS IN SCIENCE. *Botany*, 1; *Chemistry*, 15; *Geology*, 3; *Mathematics*, *Applied*, 8; *Physics*, 14; *Physiology*, 2; *Zoology*, 3.

UNIVERSITY LAW COLLEGE. Principal—S. C. Bagchi, B.A., LL.B., LL.D. Vice-Principal—B. M. Majumdar, M.A., B.L. Professors: *C.P. Code and Evidence*—Birajmohan Majumdar, M.A., B.L., and 3 others. *Crim. L.*—Haraprasad Chatterjee, M.A., B.L., and 3. *Equity*—The Principal and 3. *Hindu L. and Const. L.*—J. P. Sarbadhikary, M.A., B.L., and 8. *Internat. L., Private*—P. Chaudhury, M.A. *Jurispr. and Roman L.*—Karunamay Basu, M.A., B.L., and 8. *Land Laws*—S. C. Datta, and 4. *Real Property, Contracts and Torts*—S. C. Ray, B.A., LL.B., and 9. *T.P. Act, Mahom., and Pers. L.*—M. N. Ray, B.L., and 6.

## GENERAL INFORMATION (v. also p. 434)

Founded in 1857, this Univ. has been mainly an examining body, but has provided facilities for research since 1893 (when the Premchand Roychand Endowment was applied to this purpose), and post-graduate teaching since 1909. In 1917 a new scheme for post-graduate teaching came into operation under which all students who desire instruction in the M.A. or M.Sc. courses in Calcutta must be registered in the Senate House as Univ. students. A Commission under the Presidency of Sir Michael Sadler, K.C.S.I., appointed by the Govt. of India in Sept. 1917 to inquire into the condition and prospects of the Univ. and consider the question of a constructive policy, presented a comprehensive report and a series of important recommendations in March 1919.

The Univ. buildings include a Senate House, completed in 1872 at a cost of Rs. 4,35,000, the Durbhanga LIBRARY (85,000 vols.) with Law College, Hostel, and Univ. offices (Rs. 12,00,000), the Univ. Press, and Examn. Halls and Lecture Rooms. LABORATORIES (in Univ. Coll. of Science): Phys. and Chem. (Pure and Applied), Applied Maths., Expl. Psych., Biol., Agric., Indian Fine Arts.

FACULTIES. Arts, Science, Law, Medicine, Engineering. The Affiliated Institutions (v. *infra*) include Colleges of Law (Calcutta—Ripon and Univ.—Gauhati), Medicine (Belgachia and Calcutta), Engineering (Sibpur), and Teaching (Calcutta—David Hare and Diocesan).

DEGREES, ETC. B.A., M.A., D.Phil.; B.Sc., M.Sc., D.Sc.; B.Com.; L.T., B.T.; B.L., M.L., D.L.; M.B., M.D., M.S., M.O., D.P.H.; B.E., D.Sc. (Engin.).

STUDENTS' WELFARE. A committee of medical experts deals with all matters relating to the health of students, including physical education and organization of games and other forms of recreation. Military Training is provided for a Univ. Corps recruited from affiliated colleges. At the Hardinge Hostel for Law students the monthly charges amount to from Rs. 23 to Rs. 25.

RESEARCH STUDENTSHIPS, ETC. Premchand Roychand, Rs. 1400 p.a. for 3 yrs., awarded annually, 1 in Lit. and 1 in Science subject; Sreegopal Basu—

mallik (fellowship), Rs. 1200 p.a. for 3 yrs. in Vedanta Philos.; Durbhanga, Rs. 600 in Med.; Sir R. B. Ghosh, Rs. 900, 8 annually to Science students to be attached to the Sir R. B. G. Profs.; Guruprasanna Ghosh, 1 annually, tenable for 3 yrs. in Japan (Rs. 1000) or Europe or America (Rs. 2000) by Bengal Hindus; Palit., Rs. 1,00,000 endowment for research or investigation out of India; Sir R. B. Ghosh Travelling Fellowships (3), Rs. 2,50,000 endowment for research or investigation out of India for 1 yr.; Jubilee post-graduate scholarships in literary and scientific subjects, Rs. 32 p.m. for 2 yrs., one in each subject of the Honours B.A. and B.Sc. examns.; numerous other scholarships, medals, and prizes.

PUBLICATIONS. *Calendar*; *Calcutta Review*, quarterly, with monthly supplements, annual subsn., Rs. 7 inland, Rs. 10 foreign; *Journals* of Depts. of Letters and of Science, Rs. 9 per vol.; *Bulletin of Math. Society*.

## AFFILIATED INSTITUTIONS RECOGNIZED IN DEGREE COURSES

[M.A., etc. = Affiliated up to M.A., etc., standard.]

BANKURA, *Wesleyan College*. B.A. Principal—E. J. Thompson, B.A. Lond. Vice-Principal—A. R. Spooner, B.A. Lond. 11 other Teachers.

BARISAL, *Brojomohan Institution*. B.A. Principal, and Prof. of *Engl. Lit.*—N. L. Mukerjee, M.A.; K. P. Ghosh, M.A., acting. 18 other Teachers.

BELGACHIA, *Carmichael Medical College*. M.B. Principal—M. N. Banerjee, B.A., M.R.C.S. Lond. Profs.: *Anat.*—M. Bose, M.B., C.M. Edin. *Physiol.*—S. P. Niyogi, M.Sc., M.B. *Mat. Med.*—P. Nandi, M.D. *Midw.*—K. N. Das, C.I.E., M.D. *Surg.*—M. Mitra, M.D., F.R.C.S. Edin. *Med.*—B. C. Roy, M.D., M.R.C.P., F.R.C.S. *Jurispr.*—Lt.-Col. N. P. Sinha, I.M.S. (retd.). *Hygiene*—T. N. Majumdar, D.P.H. 29 other Teachers.

BERHAMPUR, *Krishnath College*. B.A. and B.Sc. Two years' course for Diploma in Commerce. Principal—N. G. Leather, M.A. Camb. 40 Profs. and other Teachers.

BHOWANIPUR, *South Suburban College*. Principal, and Prof. of *Econ.*—Panchanan Sinha, M.A., B.L. 18 other Teachers.

CALCUTTA, *Bangabasi College*. B.A. and B.Sc. Principal—G. C. Bose, M.A., M.R.A.C., M.R.A.S. 38 Teachers.

CALCUTTA, *Bethune College* (Girls). B.A. Supported by Govt. Principal—Miss G. M. Wright. 13 Teachers.

CALCUTTA, *City College*. B.A. and B.Sc. Principal, and Prof. of *Engl. Lit.*—Herambachandra Maitra, M.A. Vice-Principal, and Prof. of *Maths.*—K. P. Chattoraj, M.A. 44 other Teachers.

CALCUTTA, *David Hare Training College* (Govt.). B.T. Acting Principal, Prof. of *Hist. of Educn.*—Chintaharan Chakravarti, M.A., B.T. Other Profs.: Binayabhusan Sarkar, B.A., B.T.; K. B. Hore, M.A., B.T.; Banabilas Ray, M.A., B.T.; G. C. Das-gupta, B.A., B.T.

CALCUTTA, *Diocesan College* (Girls). B.A., B.T. Principal—Sister Mary Victoria. 19 Teachers.

CALCUTTA, *Loreto House* (Girls). B.A. Established 1842. Connected with Univ. since 1889. Principal—Provincial Superioress of the Loreto nuns in India. 8 other Teachers.

CALCUTTA, *Medical College of Bengal*. M.B. Principal, and Prof. of *Medicine*—Lt.-Col. F. A. F. Barnardo, C.I.E., C.B.E., M.D., F.R.C.S.E., I.M.S. Other Profs.: *Anat.*—N. Pan, M.B. *Anat. and Physiol.*—Major J. A. Shorten, I.M.S. *Bot. and Zool.*—Asst. Surg. E. N. Ghosh. *Chem.*—Lt.-Col. J. C. Boyd, I.M.S. *Dentistry*—J. E. Gill, L.D.S. *Hygiene*—C. A. Bentley, M.B., D.P.H. *Mat. Med. and Clin. Med.*—Lt.-Col. D. McCay, M.D., M.R.C.P., I.M.S. *Med. Jurispr.*—Major N. P. Sinha, I.M.S. (ret.). *Midw.*—Lt.-Col. Leicester, I.M.S. *Ophth. Med. and Surg.*—Lt.-Col. W. V. Coppinger, M.D., F.R.C.S., I.M.S. *Path.*—Capt. G. Shanks, M.D., I.M.S. *Physics*—Tulsidas Kar, M.A. *Surgery, Principles of*—Lt.-Col. F. P. Cannor, D.S.O., F.R.C.S., I.M.S.; *Surgery, Clin. and Operative*—Lt.-Col. R. P. Wilson, F.R.C.S., I.M.S. 29 other Teachers.

CALCUTTA, *Presidency College*. B.A. and B.Sc. Maintained by Govt. Number of undergrads. limited to 650. Principal—J. R. Barrow, M.A., Prof. of *English Literature*. Other Profs.: J. W. Holme, M.A. Liv.; M. Ghose, B.A. Ox.; T. S. Sterling, M.A.; Praphullachandra Ghosh, M.A.; Srikumar Banerjee, M.A.; Bhupendrachandra Basu, M.A.; B. B. Ray, M.A., acting. *Geology*—H. Crookshank. *Ment. and Mor. Philos. and Logic*—Adityanath Mukherjee, M.A., Ph.D.; Khagendranath Mitra, M.A.; R. K. Datta, M.A. *Hist.*—K. Zachariah, B.A.; Binaykumar Sen, M.A.; U. N. Ghoshal, M.A. *Pol. Econ. and Pol. Philos.*—J. C. Coyajee, B.A., LL.B.; Panchanandas Mukherjee, M.A.; D. G. Chattoraj, M.A. *Sansk., Pali, and Bengali*—Nilmani Chakrabarti, M.A.; Harihar Banerjee, M.A.; S. P. Bhattacharyya, M.A. *Arabic and Pers.*—Md. Sonaulah, M.A.; A. K. H. Siddiq; S.-ul-U. Hedayat Hossain. *Maths. and Astron.*—C. E. Cullis, M.A., Ph.D.; D. N. Mallik, B.A., Sc.D.; Saradaprasanna Das, M.A.; J. M. Bose, M.A., B.Sc. Edin.; Karunamay Khastgir, M.Sc.; H. C. Sengupta, M.A. *Phys.*—E. P. Harrison, M.A., Ph.D.; P. C. Mahalanabis, B.A., B.Sc. *Chem.*—Jyotibhushan Bhaduri, M.A., F.C.S. *Physiol.*—S. C. Mahalanabis, B.Sc.; N. C. Bhattacharyya, M.A., B.Sc. *Botany*—S. C. Banerjee, M.A.; S. C. Sinha, M.A. 25 Assts. and Demrs.

CALCUTTA, *Ripon College*. B.A., B.Sc., B.L. *Law Dept.* Principal—S. C. Chaudhuri, M.A., LL.B. Camb., Barr.-at-Law. Profs.: J. N. Kanjilal, M.A., D.L., Gangadhar Mukerjee, B.L. 9 other Teachers.

*College Department*. Principal, and Prof. of *Engl.*—N. Raye, M.A. Vice-Principal, and Prof. of *Engl.*—R. N. Ghose, M.A. 33 other Teachers.

CALCUTTA, *St. Paul's Cathedral Mission College* (formerly "The Church Missionary Society's College"). B.A. Number of students limited to 250. Acting Principal, and Prof. of *Lit.*—E. C. Dewick, M.A. Camb. Acting Vice-Principal, and Prof. of *Engl.*—H. M. Grindon, M.A. Camb. and Lond. 15 other Teachers.

CALCUTTA, *St. Xavier's College* (S.J.). B.A., B.Sc. Students of other religious persuasions are admitted. Rector—J. Fallon, S.J. 31 Teachers.

CALCUTTA, *Sanskrit College*. B.A. Principal, and Prof. of *Sanskrit*—Asutosh Sastri, M.A. Other Profs.: Maha. P. N. Tarkabhushan (*Hindu Law*); A. C. Bose, M.A. (*English*); K. D. Banerjee, M.A. (*History*); M. N. Sarkar, M.A., Ph.D. (*Philos. and Logic*). 14 other Teachers.

CALCUTTA, *Scottish Churches' College*. B.A. and B.Sc. Formerly the General Assembly's Institn. and Duff Coll. Principal, and Prof. of *Chem.*—J. Watt, M.A., D.D., F.C.S. Other Profs.: *Engl.*—J. C. Scrimgeour, M.A.; A. Cameron, M.A.; A. Warren, B.A. Lond.; J. D. Sinclair, M.A., B.D.;

M. K. Mookerjee, M.A. *Philos. and Logic*—W. S. Urquhart, M.A., D.Phil. ; G. Ewan, M.A. ; P. C. Sen, M.A. ; S. P. Biswas, M.A. *Econ.*—J. C. Kydd, M.A. ; B. B. Dasgupta, M.A. ; N. C. Bhattacharyya, M.A. *Maths.*—G. S. Mill, M.A., B.Sc. ; M. S. Sarkar, M.A. ; A. C. Ganguli, M.Sc. ; B. B. Mandal, M.Sc. *Sansk.*—B. L. Banerjee, M.A. ; K. P. Mookerjee, N. L. Vidyabinod. *Physics*—N. C. Ray, M.A. ; R. K. De, M.A., B.Sc. *Chem.*—B. C. Dutt, M.A., F.C.S. ; R. N. Chatterjee, M.A. *History*—M. L. Sarkar, M.A. ; D. T. H. McLellan, M.A. ; A. C. Sen, M.A. 10 other Teachers.

CALCUTTA, *Univ. Law College*, v. *supra*.

CALCUTTA, *Vidyasagar College* (formerly Metropolitan Institn.). B.A. and B.Sc. Principal—Saradaranjan Ray, M.A. Vice-Principal, and Prof. of *Engl. Lit.*—J. R. Banerjee, M.A., B.L. 41 other Teachers.

CHITTAGONG, *College* (Govt.). B.A. and B.Sc. Principal—H. C. Banerjee, M.A., B.L., offg., and Prof. of *Phys.* 22 other Teachers.

COMILLA, *Victoria College*. B.A. Principal and Prof. of *Engl. Lit.*—Satyendranath Basu, M.A. 12 other Teachers.

COOCH-BEHAR, *Victoria College*. B.A. Principal, and Prof. of *Maths.*—Upendranarayan Sinha, M.A. 14 other Teachers.

DAULATPUR, *Hindu Academy*. B.A. Principal—Dwijapada Banerjee, M.A. Vice-Principal—B. B. Bhattacharyya, M.A. 21 other Teachers.

FARIDPUR, *Rajendra College*. B.A. Principal—K. N. Mitra, M.A. 10 other Teachers.

GAUHATI, *Cotton College* (Govt.). M.A. in English (partially) ; B.A. and B.Sc. Principal—F. W. Südmersen, B.A. Lond. Profs. of *Engl.* : R. C. Goffin, M.A. Lond. ; Praphullachandra Ray, M.A. ; Asutosh Chatterjee, M.A. ; S. K. Bhuyan, M.A. ; B. K. Kakati, M.A. Prof. of *Physics*—D. E. Roberts, M.A. *Chem.*—D. Thomson, M.A., B.Sc., Ph.D. *Maths.*—R. K. Barat, M.A. *Philos.*—R. R. Thomas, M.A. *Sansk.*—Padmanath Vidyabinod. *Arabic and Persian*—S. Md. Mahibullah, M.A. 12 other Teachers.

GAUHATI, *Earle Law College* (Govt.). Principal—J. Barooah, Barr.-at-Law. Profs. : T. R. Phookun, Barr.-at-Law ; Satyanath Bara, B.L. ; S. N. Chakravarti, M.A., B.L.

HUGHLI COLLEGE. B.A. and B.Sc. Maintained by Govt. Principal, and Prof. of *Hist.*—R. B. Ramsbotham, M.B.E., M.A. Ox. 18 other Teachers.

KRISHNAGAR COLLEGE (Govt.). B.A. and B.Sc. Principal—Egerton Smith, M.A. 20 other Teachers.

MIDNAPORE, *Midnapore College*. B.Sc. Principal—H. C. Sanyal, M.A., B.L. 11 Teachers.

MYMENSINGH, *Anandamohan College*. B.A. Principal—Jajneswar Ghosh, M.A., Ph.D. 22 Teachers.

RAJSHAHI, *Government College*. B.A. and B.Sc. Principal, and Prof. of *Phys.*—Rai Kumudinikanta Banerjee, Bahadur, M.A. 32 other Teachers.

RANGPUR, *Carmichael College*. B.A. Principal, and Prof. of *Engl.*—N. Mookerjee, M.A. 14 other Teachers.

SERAMPORE COLLEGE (chartered in 1818 by the King of Denmark. Grants a B.D. degree which is accepted as equivalent to Calcutta B.A. as qualifying for post-graduate courses in most subjects. Bishops' College, Calcutta, is

affiliated to it). B.A. Principal, and Prof. of *Engl. and Hist.*—G. Howells, M.A., B.D., B.Litt., Ph.D. Vice-Principal, and Prof. of *Philos.*—J. Drake, B.A., B.D. 21 other Teachers.

SIBPUR, *Bengal Engineering College* (Govt.). B.E. Principal—..... Profs.: *Civil Engin.*—T. H. Richardson, B.A., B.A.I. Dub., M.I.C.E. Irel. *Elec. Engin.*—W. H. Everett, B.A., B.E., R.U.I., M.I.M.E., M.I.E.E. (on deputation) ; B. C. Gupta, offg. *Mech. Engin.*—R. Wolfenden, M.B.E., M.Sc. *Mining*—E. H. Robertson, B.A., M.Sc. Birm., M.I.E.E., F.G.S. *Phys. and Maths.*—A. Macdonald, M.A., B.Sc. Glas. ; S. N. Maitra, B.A. Camb., A.R.C.S. Lond. (acting). *Chem.*—W. Saunders, B.Sc. Lond. 26 other Teachers.

SYLHET, *Murarichand College* (Govt.). B.A. Principal—A. C. Datta, B.A. Camb. 17 Teachers.

# UNIVERSITY OF DACCA (BENGAL)

VISITOR—H.E. THE GOVERNOR-GENERAL OF INDIA.

CHANCELLOR—H.E. THE GOVERNOR OF BENGAL.

VICE-CHANCELLOR—P. J. HARTOG, C.I.E., M.A., B.Sc.

REGISTRAR—KHAN BAHADUR NAZIRUDDIN AHMAD, M.A.

## TEACHING STAFF, December 19, 1922

### *Arabic and Islamic Studies*

Waheed, S-u-U. A. N., M.A. Calc.

Ag. Head of Dept.

Wahhab, A. A., M.A., B.L. Reader.

Nazir-Hasan, S-u-U. Lectr.

Ali, Munawar Lectr.

Khalid, A. U., M.A. B.L. Lectr.

### *Chemistry*

Ghosh, J. C., D.Sc. Calc. Prof.

Sircar, A. C., Ph.D. Calc. Reader.

Neyogi, K. C., M.Sc. (Analytical C.) Reader.

De, R. L., M.Sc. Calc. Lectr.

Guha, P. C., M.Sc. Calc. Lectr.

4 Asst. Lectrs. and 1 Asst.

### *Commerce*

[Head of Dept.

Prof. Panandikar (v. Econ.)

Junnarkar, P. B., M.A., LL.B.

(Accountancy and Business Organization) Reader.

### *Economics and Politics*

[Prof.

Panandikar, S. G., M.A. Bom.

Aiyer, S. V., M.A. Mad. Lectr.

Banerjee, D. N., M.A. Calc. Lectr.

Saha, K. B., M.A. Calc. Lectr.

2 Assts.

### *Education*

West, M. P., B.A. Ox.

Hon. Reader and Head of Dept.

Katti, P. S., M.A. Camb. Reader.

4 Hon. Teachers.

### *English*

Wrenn, C. L., M.A. Ox. Ag. Prof.

Bhadra, S. N., R.B., M.A. Calc.

Reader.

Chanda, A. K., B.A. Ox. Reader.

Bhattacharyya, M. G., M.A. Calc.

Lectr.

Chaudhury, S. K., M.A. Calc. Lectr.

Guha, P. K., M.A., B.L. Calc.

Lectr.

Hasan, M., M.A. Calc. Lectr.

Nag, U. C., M.A. Calc. Lectr.

Roy, B. K., M.A., B.L. Calc. Lectr.

Chanda, S. M., M.A. Calc. Lectr.

Roy, S. R., M.A.

### *French and German*

..... Lectr.

### *History*

Majundar, R.C., M.A., Ph.D. Prof.

Rahman, A. F., B.A. Ox. Reader.

Banerjee, S. C., M.A. Calc. Lectr.

Bhattacharyya, S. N., M.A. Calc.

Lectr.

Mukkerjee, P. C., M.A. Calc. Lectr.

### *Law*

[Prof.

Sen-Gupta, N. C., M.A., D.L. Calc.

Das-Gupta, J. N., M.A., M.L.

Calc. Lectr.

5 Part-time Lectrs. and an Asst.

### *Mathematics*

Sen, B. M., M.A. Camb., M.Sc.

Calc. Prof.

Basu, N. M., M.Sc. Calc. Reader.

Ghosh, N. C., M.A. Calc. Reader.

Hakim, A., M.A. Calc. Lectr.

Ganguly, D. N., M.A. Calc. Lectr.

Ghosh, J., M.A. Calc. Lectr.

1 Asst.

*Persian and Urdu*

Khan, F. A., M.A. Calc.	Reader.
Burhanuddin, F. M.	Lectr.
Azad, S. M. Z. H., B.A.	Lectr.

*Philosophy*

Langley, G. H., M.A. Lond.	Prof.
Bhattacharyya, H. D., M.A. Calc.	Reader.
Roy, S. C., B.A. Calc., M.A. Lond.	Reader.
Bhattacharyya, U. C., M.A. Calc.	Lectr.
Mukherjee, M. N., M.A. Calc.	Lectr.
Gupta, U. N., M.A. Calc.	Lectr.

*Physics*

Jenkins, W. A., M.Sc. Sheff.	Prof.
Bose, S. N., M.Sc. Calc.	Reader.
Ghosh, S. N., M.A. Calc.	Reader.
Guha, B. C., M.Sc. Calc.	Lectr.
6 Asst. Lectrs.	

*Sanskrit*

Shastri, Maha. H. P., C.I.E., M.A. Calc.	Prof.
Chakravarti, S. C., B.A. Calc.	Reader.
Basak, R. G., M.A. Calc.	Lectr.
Bhattacharyya, G. P., M.A. Calc.	Lectr.
Shahidullah, M., M.A. Calc.	Lectr.
1 Asst.	

ASSOCIATED INSTITUTIONS. The Dacca (Govt.) Training College. The Principal and teachers are honorary teachers of the Univ. and the College students read for the L.T. and B.T. in accordance with regns. prescribed on that behalf.

## GENERAL INFORMATION (v. also p. 434)

This Univ. was established in 1921 under an Act passed in 1920 which provides for the constitution of Faculties of Arts, Science, Law, Agriculture, and Medicine. It is constituted in its main lines in accordance with the recommendations of a Committee presided over by Mr. (now Sir Robert) Nathan in 1912 and by the Calcutta Univ. Commission of 1917-19, presided over by Sir Michael Sadler. The Report of this Commission states that "two main factors may be clearly distinguished in the origination of the Scheme: first and foremost the desire of the Musalmans of Eastern Bengal to stimulate the educational progress of their community, and, secondly, the desire of the Govt. of India to create a new type of residential and teaching Univ. in India, as opposed to the present affiliating type. To these must be added a third factor of especial importance, the desire of the Govt. to relieve the congestion of the Univ. of Calcutta."\* Although special attention will be devoted to Islamic Studies and to the needs of the Musulman community, the Univ. will be open to all, without distinction of sex, race, creed, or class. It is a unitary and residential Univ., of which the constitution resembles in many respects that of the modern English universities. The Authorities of the Univ. include a Court, an Executive Council, an Academic Council, and Faculties; and the Teaching Staff has the main responsibility for all matters connected with teaching and examns. The students (other than those living under specially approved conditions) reside in the Halls and Hostels situated in the Univ. domain, and the Univ. teachers also reside in the houses erected for them thereon. The domain consists of about a square mile of fine park land, including over 100 acres of playing fields. It is adjacent to the Civil Station of Dacca and to a park called the Ramna, and lies from 1 to 1½ miles

\* Chapter xxxiii. of the *Report* deals in great detail with the scheme for the Dacca Univ.

north-west from the centre of Dacca City. It is provided with electric light and power.

The chief existing buildings for teaching and administrative purposes include: A Senate House with residential block; central buildings, containing about 200 rooms, which cover 117,000 feet of floor space used for Class-rooms and Library (at present utilized partly as a hostel for Muslim students); Chemical and Physical Laboratories, each including about 12,000 sq. feet of floor space, and now being enlarged; the Curzon Hall (which accommodates about 2000 persons); the Dacca Hall buildings, with residential accommodation for 160 students; the Jagannath Hall buildings, providing for 200 students.

**LIBRARY**, 35,000 vols. **LABORATORIES**: Physical, with metal and wood workshops; Chemical, with special arrangements for training in commercial analytic methods.

**FACULTIES.** Arts, Science, Law.

**ADMISSION.** The standard required for admission to courses leading to degrees is that of the Intermediate examn. of an Indian Univ.

**DEGREES, ETC.** The duration of the courses of studies prescribed are as follows: for B.A. or B.Sc. ordinary, 2 yrs., with Honours, 3 yrs.; M.A. or M.Sc., 2 yrs., or in the case of a Dacca Honours B.A. or B.Sc., 1 yr.; B.T. or L.T., 1 yr.; M.T., 3 yrs.; B.Com., 3 yrs.; B.L., 3 yrs. (Dacca Honours B.A., 2 yrs.); M.L., 3 yrs. The Ph.D., D.Sc., or D.L. may be taken by graduates of 4 yrs.' standing, but graduates of other Univs. must first pursue researches in this Univ. for 2 yrs.; published research work required.

**SCHOLARSHIPS** open to graduates: 11 of Rs. 32 each p.m.

**FEES.** Tuition, per session: for B.A. and B.Sc. course, Rs. 96; M.A., Rs. 120; M.Sc., Rs. 144; Law, Rs. 84; Registration, Re. 1; Admission, Rs. 5; Athletic, Rs. 5; Students' Union, Rs. 3. No fees charged from research students. **HOSTELS**: Seat-rent varies from Rs. 2 to Rs. 4 p.m., including cost of light, water, medical attendance, medicine and servants. Cost of food about Rs. 12 p.m.

**TUTORIAL CLASSES** have been organised for all the Depts. of Study. All the teachers of the Univ. are engaged on the work under the control of the Heads of the Depts. and the Provosts.

## THE YEAR 1921-22

**NUMBER OF STUDENTS.** B.A. 371, B.Sc. 150, B.Com. 54, M.A. 178, M.Sc. 39, Law 272, B.T. 70, L.T. 4, Research 9, students of Dacca Medical School who read Physics and Chemistry in the Univ. 139; total 1286.

**HONORARY DEGREES.** LL.D., the Earl of Ronaldshay, first Chancellor of the Univ.

**PUBLIC LECTURES.** Dr. Sir J. C. Bose (Plant Life), Prof. Van Tyne (American Politics), Prof. Sylvain Lévi (Asiatic Humanism), the Vice-Chancellor ("Kultur").

**BENEFACTIONS.** Altaf Ali Lectureship in Maths. (Rs. 300 p.m.); Nawab Ali Stipend Fund (Rs. 16,000); and several small donations for prizes and scholarships.



# UNIVERSITY OF DELHI

CHANCELLOR—THE GOVERNOR-GENERAL OF INDIA.

PRO-CHANCELLOR—HON. KHAN BAHADUR MIAN SIR MUHAMMAD SHAFI, K.C.S.I., C.I.E., Bar.-at-Law, Education Member, Govt. of India.

VICE-CHANCELLOR—H. S. GOUR, M.A., D.C.L., LL.D., M.L.A., Bar.-at-Law.

RECTOR—REV. F. J. WESTERN, M.A. Ox.

REGISTRAR—G. M. D. SUFI, M.A.

CONSTITUENT COLLEGES. St. Stephen's; Hindu; Ramjas.

## TEACHING STAFF, November 1922

(U) denotes University Reader; (S.), (H.), (R.) denote St. Stephen's, Hindu, Ramjas Colleges respectively.

<i>Arabic</i>	[(S.) (U.).	Monk, F. F., M.A. Ox.	(S.).
Abdur-Rahman, Munshi Fazil,		Sen, S. K., B.A. Ox.	(H.).
Maulvi Fazil (A. and History)		Shahani, M. S., M.A. Ox.	(H.).
<i>Biology</i>	[(U.) (R.).	Sharp, C. H. C., M.A. Ox.	(S.).
Ahluwalia, Gopalji., M.Sc.		Thadani, N. V., M.A. (Engl.)	
Balkishan Das, M.Sc.	(H.).		(U.) (H.).
<i>Chemistry</i>		Young, C. B., M.A. Ox. (Engl. and	
Mitra, J. N., M.Sc.	(S.).	Philos.)	(U.) (S.).
Sant Ram, M.Sc. (C. and Physics)		Qanungo, K. R., M.A. (Hist.)	
	(R.).		(U.) (R.).
Seth, R. B., M.Sc.	(U.) (H.).	Rai, G., M.A. (Hist.)	(H.).
<i>Civics</i>		Young, P. N. F., M.A. Camb.	
Williams, Rushbrook, M.A.,			(U.) (S.).
D.Litt.	Hon. Prof.	<i>Mathematics</i>	
<i>Economics</i>		Bannerji, A. T., M.A.	(U.) (H.).
De, K. C., M.A. (Ec., Engl., and		Jain Permanand, M.A.	(S.).
Philos.)	(U.) (R.).	Mukerji, S. K., M.A. Panj., B.A.	
Hirde Narain, M.A. (Ec. and		Camb.	(U.) (S.).
Philos.)	(H.).	Ram Behari, M.A.	(S.).
Nag, K. C., M.A.	(U.) (S.).	Sitaram, M.A.	(R.).
<i>English and History</i> , v. also		Sri Ram, M.A.	(H.).
Arabic, Ec.		<i>Persian</i>	
Bali, H. C., M.A. (Engl.)	(H.).	Ali, Syed Azhar, M.A., M.O.L.,	
Capron, R. S., B.A. Camb.	(S.).	Munshi F.	(S.).
Chakravarti, M. K., M.A. (Engl.)		Piyare Lal, Munshi F.	(R.).
	(R.).	Verma, A. N., M.A.	(U.) (H.).
Das-Gupta, A., M.A. (Engl.)	(H.).	<i>Philosophy</i> , v. also Ec., Hist.	
Keswani, L. D., M.A. (Engl.)	(R.).	Mitra, C. C., M.A., B.L.	(H.).

Sen, N. K., M.A.	(U.) (S.).	<i>Sanskrit</i>	
<i>Physics</i> , v. also Chem.		Har Narain, Shas., Mahamahopadya	(U.) (H.).
Chabra, B. D., M.Sc.	(H.).	Lachhmi-Dhar, M.A., M.O.L., Shas.	(U.) (S.).
Khub Ram, M.A. Panj., M.Sc. Leeds	(U.) (S.).	Krishna-Lal, M.A.	(R.).
Sant Ram, M.Sc.	(R.).		

### GENERAL INFORMATION (v. also p. 434)

The three constituent colleges, formerly affiliated to the Univ. of the Panjab, were united to form a teaching and residential Univ. (Govt. of India Act, No. VIII. of 1922), with effect from May 1, 1922. The authorities of the Univ. are a Court, an Executive Council, an Academic Council, and Faculties and Boards of Studies. There are a Residence, Health, and Discipline Board, and a Univ. Sports Committee. The Univ. does not hold a Matricn. Examn. As a temporary measure, it admits students who have passed the matricn. examns. of other Indian Univs., but will after 5 years admit only those who have passed the Intermediate (Arts or Science) examn.

DEGREES. B.A., B.Sc., M.A., M.Sc., Ph.D., D.Litt.

AVERAGE HOSTEL EXPENSES, Rs. 20 p.m.

NUMBER OF STUDENTS, 750.

# UNIVERSITY OF LUCKNOW

VISITOR—THE GOVERNOR-GENERAL OF INDIA.

CHANCELLOR—THE GOVERNOR OF THE UNITED PROVINCES OF AGRA AND OUDH.

VICE-CHANCELLOR—RAI G. N. CHAKRAVARTI BAHADUR, I.S.O., M.A., LL.B.

TREASURER—E. A. H. BLUNT, O.B.E., I.C.S.

REGISTRAR—MAJOR T. F. O'DONNELL, B.A.

## COLLEGES AND DEPARTMENTS

KING GEORGE'S MEDICAL COLLEGE. Principal—Lt.-Col. C. A. Sprawson, C.I.E., M.D., B.S. Lond., F.R.C.P., I.M.S. Maintained by the Univ.

CANNING COLLEGE (Arts and Science). Principal, M. B. Cameron, M.A., B.Sc. Lond. Maintained by the Univ.

ISABELLA THOBURN COLLEGE (Women's). Principal, Florence L. Nichols, M.A. Boston.

DEPARTMENT OF COMMERCE. Head of Dept., E. M. Moffatt, M.A. New York.

LAW DEPARTMENT. Head of Dept., Pt. J. N. Chak, B.A. Ox., Barr.-at-Law.

## PROFESSORS, LECTURERS, ETC., September 1, 1922

### KING GEORGE'S MEDICAL COLLEGE

<i>Anatomy</i>	Misra, C. P., L.M.S. Panj. Lectr.
Said-uz-Zafar Khan, Sahebzada,	
M.B. Edin., D.T.M. Liv. Prof.	<i>Pathology</i>
Goil, Capt. J. H., M.B., B.S. All.	..... Prof.
Lectr.	Mukerji, Capt. J. G., L.M.S. Panj.
2 Demrs.	Reader.
<i>Materia Medica &amp; Med. Jurispr.</i>	2 Demrs.
Modi, J. P., L.R.C.P. & S.E.,	<i>Physiology</i>
L.F.P. & S.G. Reader.	Lal, R., M.B., B.S. Panj. Prof.
1 Demr.	Mathur, S. N., M.B., B.S. All.
<i>Medicine</i>	Lectr.
The Principal Prof.	<i>Public Health</i>
Nyas, B. N., R.B., M.B. Panj.	Pandya, D. D., L.R.C.P. & S.E.,
Ag. Prof.	L.F.P. & S.G., D.P.H. Camb.
Sahai, H., M.B., B.S. Panj. Lectr.	Prof.
<i>Obstetrics and Gynaecology</i>	
Hunter, Lt.-Col. T., M.A., B.Sc.,	<i>Surgery</i>
M.D. Glas. Prof.	Nutt, Lt.-Col. H. R., M.D. Lond.,
<i>Ophthalmology</i>	F.R.C.S., I.M.S. Prof.
Tambe, G. R., B.A., B.Sc., M.B.,	Nigam, K. S., M.D. All., F.R.C.S.
B.S. Bom., D.O. Ox. Prof.	Eng., D.T.M. Lond. Lectr.

## CANNING COLLEGE (ARTS AND SCIENCE)

<i>Arabic</i>	[Reader.	Mukherji, R. K., M.A., Ph.D.	
Kamal-uddin, Sa. Md., M.A. Calc.	(Indian)	Reader.	
Husain, S. J., M.A., LL.B. All.	Banerji, S., M.A., L.T. All.	Lectr.	
	Kumar, B. R., B.A. Ox.	Lectr.	
<i>Botany</i>	[Prof.	<i>Mathematics</i>	[Reader.
Sahni, Birbal, M.A., D.Sc. Lond.		Strang, J. A., M.A., B.Sc. Edin.	
Chaudhury, H. P., M.Sc. Panj.		Narayan, Lakshmi, M.A.	Reader.
	Lectr.	Banerji, S., M.A.	Lectr.
<i>Chemistry</i>		<i>Modern European Languages</i>	
MacMahon, P. S., M.Sc. Manc.		Keightley, B., M.A., Barr.-at-law	Reader.
	Reader.		
Gupta, B. M., M.Sc. All., Ph.D.		<i>Persian</i>	
	Asst. Prof.	Rahman, M.B., M.A.	Reader
Sane, S. M., M.Sc., Ph.D.	Reader.	Nurul-Aziz, Moulvi Md., M.A.	
Das, H. R., M.Sc.	Lectr.		Lectr.
<i>Economics</i>		<i>Philosophy</i>	
Mukerji, R. K., M.A., Ph.D.	Prof.	The Principal	Reader.
Mukerji, B. B., M.A., B.L.	Reader.	Cornelius, J. J., M.A.	Reader.
Dey, H. L., M.A.	Lectr.	Ahmad-Shah, E., M.A. All.	Lectr.
<i>English</i>		<i>Physics</i>	[Prof.
Brown, C. J., M.A. Ox.	Reader.	Mohammed, Wali, M.A., Ph.D.	
Walker, H. S., M.A. Edin.		Roy, S. N., M.Sc. All.	Asst. Prof.
	Reader.	Deodhar, D. B., M.Sc.	Reader.
Nixon, R. H., M.A.	Reader.	Banerji, B. B., M.Sc.	Lectr.
Roy, F. T., M.A.	Lectr.	<i>Sanskrit</i>	Reader.
Pinto, F. T., B.A., LL.B.	Lectr.	Iyer, K. A. Subramanya, M.A.	
Roy, C. G., M.A. All.	Jr. Lectr.	Shastri, B. N., M.A.	Lectr.
Bhattacharya, A. J., M.A.	„	Thakur, A. N., M.A.	Lectr.
Amir-Ali, Syed, M.A., B.L. Calc.		<i>Zoology</i>	
	Jr. Lectr.	Bahl, K. N., M.Sc.	Reader.
<i>History</i>	[Reader.	Thapar, Sardar Govind Singh,	
Smith, S. B., M.A. (Modern)		M.Sc.	Lectr.

## ISABELLA THOBURN COLLEGE (WOMEN'S)

<i>Economics</i>	[Reader.	<i>Latin</i>	
Reddick, Miss O. I., M.A. Columbia		Manchester, Miss R. C., M.A. Bryn	
<i>English</i>		Mawr	Reader.
Dimmitt, Miss M. A., B.A., D.E.		<i>Persian</i>	
Pauw.	Reader.	Nath, Munshi Baij,	Lectr.
<i>History</i>	[Reader.	<i>Philosophy</i>	[Reader.
Eustice, Miss W. E., M.A. Minn.		Rockwell, Miss L. M., B.A. Gaucher	

## DEPARTMENT OF COMMERCE

Chatterji, B. N., M.A., B.L. Calc.	Reader.
Dubey, D. S., M.A. All.	Lectr.
Pant, D., B.Com. Bom.	Lectr.

## LAW DEPARTMENT

Readers (Part-time):

Husain, Hyder, B.A., LL.B., Dub.,	Banerji, J. K., M.A., LL.B. All.
Barr.-at-Law.	Hajela, K. S., M.Sc., LL.B. All.
Misra, J. N., M.A., LL.D.,	Hasan, Ghulam, B.A. Panj., LL.B.
Barr.-at-Law.	All.

## GENERAL INFORMATION (v. also p. 434)

This residential and teaching Univ. was established under an Act of the Provincial Legislature passed in Nov. 1920. The authorities of the Univ. include a Court, Executive Council, Academic Council, Committee of Reference, and Faculties.

FACULTIES. Arts, Science, Commerce, Medicine, Law.

ADMISSION. Qualifications for Degree courses: Arts or Science—the Intermediate Examn. of an Indian Univ. ; Law—Degree in Arts or Science ; Commerce—Commerce Diploma Certif. of Allahabad ; Med.—Degree in Science of Cal., Mad., Bom., All., or Panj. taken with Biol. as one of optional subjects, or, subject to certain conditions, the Interm. Examn. of Science Faculty of Panj. or equivalent examn. of Calc., Mad., or Bom., or P.Sc. Examn. of All.

DEGREE COURSES for B.A., B.Sc., B.Com., 2 yrs. ; M.A., M.Sc., 2 yrs. ; LL.B., 2 yrs. ; M.B., B.S., 5 yrs. The lectures are supplemented by tutorial work, each student being assigned to a tutor who gives him personal attention and guidance in his course of study.

FEES for tuition for full course : B.A., B.Sc., LL.B., or B.Com., Rs. 200 ; M.A. or M.Sc., Rs. 240 ; M.B., B.S., Rs. 594.

SCHOLARSHIPS for Graduates. The Univ. provides 6 of the value of Rs. 30 p.m. each ; Canning College, one of Rs. 100 and three of Rs. 30.

RESIDENCE. Students are required, unless specially exempted, to live in hostels.

ADULT EDUCATION. A system of public lectures by members of the staff and others has been started.

## THE YEAR 1921-22

The Univ. was visited by H.R.H. the Prince of Wales.

NUMBER OF STUDENTS in Arts 300, Science 80, Med. 174, Law 65, Comm. 13.

# UNIVERSITY OF MADRAS

CHANCELLOR—THE GOVERNOR OF MADRAS.

VICE-CHANCELLOR AND CHAIRMAN OF THE SYNDICATE—The Hon. Mr.  
K. SRINIVASA AIYANGAR, B.A., B.L.

REGISTRAR—F. DEWSBURY, B.A., LL.B.

## UNIVERSITY PROFESSORS, September 9, 1922

<i>Indian History and Archæology</i>	<i>Indian Economics</i>	
Rao Sahib S. Krishnaswami	....	Prof.
Aiyangar, M.A., Ph.D. Calc.	T. K. Duraiswami Aiyar, M.A., L.T.	Asst. Prof.

## GENERAL INFORMATION (v. also p. 434)

This Univ., founded in 1857, has hitherto been mainly an examining body, but has, since 1912, maintained a small teaching staff and organized special lectures by persons eminent in Arts and Science in Europe and India. It appoints annually ordinary Univ. lecturers, and arranges inter-collegiate lectures mainly to assist the affiliated colleges in Honours courses.

FACULTIES. Arts, Science, Law, Medicine, Engineering.

ADMISSION. The Matricn. examn. has been almost completely superseded by the School-Leaving Certif. scheme.

DEGREES, ETC. B.A., B.Sc., B.A. (Honours), B.Sc. (Honours), M.A., M.Sc.; B.Sc.Agr.; L.T.; B.L., M.L., LL.D.; M.B., B.S., L.M.S., B.San.Sc., M.D., M.S.; B.E.; M.O.L. (Oriental Learning).

DIPLOMAS. Titles in Oriental Learning (4 yrs.' course); Econ. (1 or 3 yrs.').  
CERTIFICATES of Proficiency in Oriental Learning (2 yrs.').

For the B.A. (Honours) an extra yr. of study is required.

RECOGNITION of examns. of other Univs. is not granted in general terms. The Syndicate deals with each application on its merits.

FEES for Univ. examns. range from Rs. 12 for matricn. to Rs. 100 for higher degrees.

RESIDENCE, ETC. Minimum cost of board and lodging for students living in European style, Rs. 50 p.m., for Indians, Rs. 30. A Students' Club, started under the auspices of the Madras Govt. in 1919, provides inexpensive meals and facilities for games and social intercourse irrespective of caste or creed.

RESEARCH STUDENTSHIPS not exceeding 8 annually, tenable 3 or 4 yrs., value Rs. 100 to Rs. 200 p.m.

PUBLICATIONS. *Calendar* (Jan.)—vol. i., Administration, Regns., Syllabuses; vol. ii., Affil. Colls., Endowments, Graduates. *Annual Report. Minutes.*

## AFFILIATED COLLEGES RECOGNIZED IN DEGREE COURSES

### Arts and Science

ANANTAPUR, *Ceded Districts College*. Principal—R. M. Statham, M.A.

CHIDAMBARAM, *Sri Minakshi College*. Principal—K. A. Nilakantanma.

HYDERABAD, *Nizam College*. Principal, and Prof. of *Hist.*—K. Burnett, M.A. Ox.

KUMBAKONAM COLLEGE (Govt.). Ag. Principal—Rai Sahib P. Rajagopala Aiyar, M.A.

MADRAS, *Christian College*. Supported by Church and U.F. Church of Scotland and several Missionary Societies. Principal and Prof. of *Philos.*—E. M. Macphail, C.B.E., M.A., D.D. Acting Principal—W. Meston, M.A., B.D. Professors: *Chem.*—E. Barnes, B.Sc. *Engl. Lang. and Lit.*—F. W. Henderson, M.A.; G. Matthews, M.A., B.Litt.; S. J. Crawford, M.A., B.Litt.; W. L. Campbell, B.A.; K. C. Macartney, M.A.; W. Meston, M.A., B.D. *Hist.*—F. E. Corley, M.A.; J. N. Anderson, M.A. *Maths.*—E. B. Ross, M.A. *Ment. and Mor. Sc.*—A. G. Hogg, M.A.; A. J. Mackenzie, M.A.; A. S. Woodburne, M.A., B.D., Ph.D. *Phys. Sc.*—A. Moffat, M.A., B.Sc., LL.D. 29 other Teachers.

MADRAS, *Muhammadan College* (Govt.). For Muhammadans. Principal and Lectr. in *Engl.*—E. W. Green, M.A.

MADRAS, *Pachaiyappa's College*. For Hindus. Principal, and Prof. of *Hist.*—M. Ratnaswami, M.A., Barr.-at-Law. 34 other Teachers.

MADRAS, *Presidency College* (Govt.). Principal, and Prof. of *Engl.*—H. S. Duncan, M.A. Other Profs.: *Bot.*—P. E. Fyson, B.A. Camb. *Chem.*—W. Erlam Smith, M.A. Ox. (Acting Principal); B. B. Dey, D.Sc. Lond., F.I.C. (Ag.). *Econ.*—J. Mathai, B.Litt. Ox., D.Sc. Lond., B.L. *Engl.*—H. S. Duncan, M.A.; S. E. Ranganathan, M.A., L.T. *Geol.*—H. Narayana Rau, M.A. *Hist.*—M.A. Candeth, B.A., LL.B. Camb. *Maths.*—K. Ananda Rao, B.A. Camb. *Ment. and Mor. Sc.*—A. Chakravarti, M.A., L.T. *Physics*—Savoor, S. R. U., B.Sc. Lond., B.A. Camb. *Math. Phys.*—P. V. Seshu Aiyar, B.A., L.T. *Sansk.*—S. Kuppaswami Sastri, M.A. *Zool.*—K. Ramunni Menon, M.A. Camb. 35 other Teachers.

MADRAS, *Queen Mary's College*. Principal—Miss de la Hey. 5 other Profs.

MADRAS, *Women's Christian College*. Principal, and Prof. of *Engl.*, etc.—Miss E. McDougall, M.A. Vice-Principal, and Prof. of *Maths.* and *Phys.*—Miss E. M. Coon, M.A., Ph.D. 6 other resident Profs.

MADURA, *American College* (Mission). Principal, and Prof. of *Engl.*—W. M. Zumbro, M.A. Prof. of *Engl.*—E. L. Notling, B.A. *Hist. and Econ.*—A. J. Saunders, M.A. *Phys.*—E. M. Flint, M.A., B.Sc. 18 other Teachers.

MANGALORE, *St. Aloysius' College* (S.J.). Rector and Principal—C. Perazzi, D.D. 22 other Teachers.

MANNARGUDI, *Findlay College* (Wesleyan Mission). Principal, and Prof. of *Engl.*—R. Smailes, M.A. Camb. Prof. of *Hist.*—G. Satyanarayanamurti, M.A. 13 other Teachers.

MASULIPATAM, *Noble College* (Church Miss. Soc.). Govt. annual grant. Ag. Principal—J. Roystrock, M.A. Vice-Principal—A. B. Johnston, M.A. 17 Profs., etc.

RAJAHMUNDY, *Government College*. Principal, and Prof. of *Engl.*—N. R. Krishnamma, B.A. 26 other Teachers.

TRICHINOPOLY, *St. Joseph's College* (S.J.). Open to all creeds and classes, but primarily for R.C.'s. Rector—P. Carty. Principal—F. Bertram. Ag Principal—C. Leigh. Profs.: *Bot. and Phys.*—E. Gombert. *Chem.*—A. Hass. *Org. Chem. and Zool.*—F. J. Caius. *Econ.*—P. Carty. *Engl.*—H. J. Quinn. *Hist.*—L. V. Newton. *Maths.*—C. Pruvôt. *Phys.*—D. Honoré; P. E. Subrahmanya Aiyar, M.A. *French*—J. Bourdot. *Latin*—E. Rapinal. *Polit. Sc.*—J. Castets. 30 other Teachers.

TRICHINOPOLY, *S.P.G. College*. Principal and Warden, and Prof. of *Engl.*—A. F. Gardiner, M.A. Vice-Principal—W. H. M. Lonsdale, M.A. 27 Profs. and Lectrs.

TRIVANDRUM, *Maharaja's College* (Govt.). Principal, and Prof. of *Appl. Maths. and Physics*—J. Stephenson, B.Sc., A.R.C.Sc. Lond. 29 other Teachers.

VIZIANAGRAM, *Maharaja's College*. Principal, and Lectr. in *Chem.*—Y. Narasinham.

### Teaching

MADRAS, *Teachers' College* (Govt.). Principal—R. G. Grieve, M.A. 13 other Teachers.

TREVANDRUM, *Training College* (Govt.). Principal—G. F. Clark, M.A., Ph.D. 7 other Teachers.

### Law

MADRAS, *Law College*. Principal—A. Davis, M.A., Barr.-at-Law. Profs.: K. P. Lakshmana Rao, B.A., B.L. 6 Asst. Profs.

TRIVANDRUM, *Maharaja's Law Coll.* (Govt.). Principal—H. S. Chatfield, M.A., Barr.-at-Law. Senr. Profs.—E. J. John, B.A., B.L.; K. G. Paramesvara Menon, B.A., B.L. 7 other Teachers.

### Medical

MADRAS, *Medical College* (subject to the authority of the Surg.-Genl. with the Govt. of Mad.). Its certifs. are recognized by the Colls. of Surgs. of Eng., Scot., and Irel. Women students are admitted free. Principal—Lt.-Col. F. F. Elwes, C.I.E., M.D., I.M.S. Other Profs.: *Anat.*—G. Rama Rao, M.B., C.M. *Dent. Surg.*—C. F. Badcock, L.D.S. *Hyg.*—P. S. Chandrasekhar, B.A., M.D. *Mat. Med.*—Major A. W. J. Lynsdale. *Med.*—Maj. A. C. Ingram, B.A., M.D., D.Ph., I.M.S. *Med. Jurispr.*—Maj. J. M. Skinner, M.B., I.M.S. *Midw.*—Major C. A. F. Hingston, I.M.S. *Ophth.*—Major H. Kirkpatrick, M.B., I.M.S. *Path.*—Major A. J. H. Russell, M.D., I.M.S. *Physiol.*—Lt.-Col. C. Donovan, B.A., M.D., I.M.S. *Surg. and Biol.*—Lt.-Col. W. J. Niblock, M.B., F.R.C.S.I., I.M.S. 32 Lectrs. and Assts.

### Engineering

MADRAS, *College of Engineering*. Principal—W. H. James, M.Sc., M.I.M.E., A.M.I.C.E. Profs.: *Civil E.*—G. Nagarathnam Aiyar, B.A., B.E.; K. C. Chakko, D.Sc. (Eng.) Lond. *Mech. E.*—C. L. Cartwright, M.I.M.E., A.M.I.C.E., M.I.E.E. *Elec. E.*—H. B. Mathews, M.I.E.E. *Maths.*—K. R. Ramaswami Aiyangar, M.A., L.T. *Technical Chem.*—S. N. Dhar, D.Sc. Lond., M.Sc. Calc. 25 Instructors.



## Oriental Learning

Two Sanskrit Colleges in Madras and sixteen in other towns are recognized as qualified to provide instruction for the Oriental Titles.

## THE YEAR 1921-22

BENEFACTIONS. For Scholarship, Rs. 6000 ; for medal, Rs. 1500 ; for two prizes, Rs. 17,900.

CHANGES IN REGULATIONS. Degree in Agric. instituted and Agric. College at Coimbatore affiliated ; Regns. for M.B., B.S., and L.M.S. to be amended, as indicated by the Gen. Med. Council, to ensure adequate training in mid-wifery.

DEGREES CONFERRED (1920). B.A.—745 ; B.A. (Hons.) and M.A.—226 ; B.L.—306 ; M.L.—17 ; L.T.—277 ; M.B., B.S.—19 ; L.M.S.—8 ; B.San.Sc.—1 ; B.E.—17.

# UNIVERSITY OF MYSORE

CHANCELLOR—H.H. THE MAHARAJA OF MYSORE.

PRO-CHANCELLOR—H.H. SRI NARASIMHA RAJA WADIYAR, G.C.I.E.,  
Yuvaraja of Mysore.

VICE-CHANCELLOR—BRAJENDRA NATH SEAL, M.A., Ph.D.

REGISTRAR—V. SUBRAHMANYA IYER, B.A.

LIBRARIANS—N. NARASIMHAMURTHI, M.A., B.L.; (Oriental L.) R.  
SHAMA SASTRI, B.A., Ph.D.

## CONSTITUENT COLLEGES

### *At Mysore*

The Maharaja's College.

The Maharani Women's College.

### *At Bangalore*

The Central College.

The College of Engineering.

## PROFESSORS, ETC., August 1922

[M., W., C., E.=at Maharaja's, Women's, Central, Engineering  
College. V=Visiting.]

### *Botany (C.)*

Sampatkumaran, M.A., Ph.D.Chic.

1 Demr. Acting Prof.

### *Chemistry*

[Prof. (C.)]

Usher, F. L., B.Sc. Lond.

Srinivasa Rao, M. G., M.A.

Prof. (C.)

3 other Teachers (C. and E.).

### *Commerce (M.)*

3 Teachers.

### *Economics*

Subba Rao, M.A. Camb., Barr.-at-

Law (Principal) Prof. (M.).

2 Lectrs. (W. and E.).

### *Engineering (E.)*

Seshachar, K. R., B.A., B.E.

(Principal) (Civ. E.) Prof.

Ramaswamy, E. K., B.Sc.,

A.C.G.I. (Mech. E.)

Iyengar, N. N., B.A. (Elec. E.)

Prof.

4 Asst. Profs.

### *English*

Mackintosh, A. B., B.A. Ox., M.A.

St. And. Prof. (M., W.).

Rollo, J. C., B.A. Ox., M.A. Glas.

Prof. (M., W.).

Sell, F. R., M.A. Ox. Prof. (C.).

McAlpine, E. G., M.A. Edin.

Prof. (C.).

Hensman, Mrs. S. G., M.A.

Prof. (W.).

Srikantia, B. M., M.A., B.L.

Junr. Prof. (M., W.).

1 Asst. Prof., 3 other Teachers.

### *French*

Argaut, J. B. Lectr. (V., M., W.).

Collart, Father Lectr. (V., C.).

### *Geology (C.)*

Sampathiengar, P., M.A. Prof.

1 other Teacher.

### *Hindustani and Persian*

Aga M. Abbas Shooshtry

Asst. Prof. (M.).

2 Munshis (M., C.); 1 Teacher

(M.).

### *History*

..... Prof. (M., W.).

Krishnaswami Iyengar, S. M.A.,

Ph.D. Prof. (M.).

Sri Rukminiamma, K. D., B.A.

Supt. (W.).

1 Asst. Prof. (M., W.); 2 other

Teachers.

<i>Kannada</i>	Venkatanaranappa, B., M.A.
Krishnappa, B., M.A.	Junr. Prof. (C.).
Asst. Prof. (M.).	Venkatesachar, B., M.A.
1 Tutor (C.) ; 2 Pandits (M., C.).	Junr. Prof. (C.).
	4 other Teachers (C.).
<i>Mathematics</i>	<i>Sanskrit</i>
Narayana Iyengar, M. T., M.A.	Hiriyanna, M., M.A., L.T.
Prof. (C.).	Prof. (M.).
2 Asst. Profs. ; 1 other Teacher (C.).	1 Asst. Prof. (M.) ; 5 other Teachers (M., C.).
<i>Philosophy</i> (M.)	<i>Tamil and Telugu</i>
Wadia, A. R., B.A. Camb., Barr.-at-Law	4 Pandits (M., C.).
Prof.	
1 Asst. Prof. ; 1 Lectr.	<i>Zoology</i> (C.)
<i>Physics</i>	Narayana Rao, C. R., M.A., L.T.
Metcalfe, E. P., B.Sc. Lond.	Junr. Prof.
(Principal)	1 Asst. Prof.
Prof. (C.).	

### GENERAL INFORMATION (v. also p. 434)

This Univ. was founded in 1916 with two constituent Colleges, the Central Coll., Bangalore, and Maharaja's Coll., Mysore, which had for 25 yrs. been affiliated to the Univ. of Madras. To these have since been added the Women's and Engineering Colleges. The executive government is vested in a Council of from 9 to 15 members, comprising the Vice-Chancellor, Insp.-Genl. of Educn., Principals of Constituent Colls., Deans of Faculties, of Arts and Science, and member appointed by the Chancellor, or, if Govt. so direct, elected by the Senate from among its members. The Senate is charged with the organization of instruction, etc. It consists of from 40 to 70 members, including the Council, the Univ. Profs., and persons nominated by the Chancellor or elected with his approval.

**LIBRARIES.** Univ., 10,000 vols. ; Colls., 24,000 ; Sansk. and Oriental, 11,000 vols. and 9600 MSS.

**FACULTIES.** Arts, Science. **TERMS :** Jan.-April, July-Dec.

**ADMISSION** to B.A. or B.Sc. courses is normally by Entrance examn. in English, a second language, and either (a) Phys., Chem., and Maths. or Nat. Sc. or (b) Hist., Logic, and Sansk. or Pers. or Elem. Econ. Candidates prepare for this by an *extra* yr. of study in Collegiate High Schools after completing the ordinary High School course. The Interim. examn. of any other Indian Univ. is accepted as equivalent to the 1st yr. examn. and qualifies for admission to the 2nd yr. class. Admission to the B.E. course is by the Entrance examn. with Phys., Chem., and Maths. ; to the B.Com. course by the Entrance examn. or corresponding examn. of any other Univ. Graduates in Arts of other Indian Univs. are admitted to the M.A. courses provided they have passed their degree examns. in cognate subjects. The B.A. and B.Sc. of other Indian Univs. are recognized for the purpose of admission to the B.T. course.

**DEGREE COURSES.** 3 yrs.—B.A., B.Sc., B.Com. ; 4 yrs.—B.E. (passed candidates will be eligible to take the degree after a year's practical course in a recognized firm) ; graduate course for M.A.—2 yrs. Courses for B.T. (teaching) and M.Sc. not yet organized. The D.Lit. and D.Sc. are Honorary.

**RECOGNITION by other Univs.** The B.A. and B.Sc. qualify for admission to M.A. and M.Sc. courses of Calc.; the B.A. for admission to the LL.B. course of Bombay or Madras. The 1st yr. Certif. examn. is recognized by Bombay as equal to the same examn. of one of its Art Colleges. With Phys., Chem., and Maths., or Zool., Geol., and Bot., it is accepted by Calc. as equal to the I.Sc. examn. for admission to the Prelim. Sc. M.B. examn. The B.A. and B.Sc. degrees are considered equivalent to the Panjab B.A. and B.Sc. degrees. They have been recognized by the Univ. of Oxford for admission up to Michs. 1923 to status of Indian Junior Student.

**FEES** for courses for Bachelorship, Rs. 60 p.a. (B.E., Rs. 100).

**RESIDENCE.** Hostels at Colleges. Cost of living about Rs. 216 p.a. at Mysore, Rs. 360 at Bangalore.

**AN APPOINTMENTS BUREAU** is maintained.

**INSPECTION OF SCHOOLS** recognized by the Univ. is done by Profs. deputed by the Council.

## THE YEAR 1921-22

**BENEFACTIONS** received up to July 1922 brought the total endowment fund up to Rs. 1,81,301.

**NUMBER OF STUDENTS.** Maharaja's College, 452; Central, 416; Maharani's, 8; Engineering, 147.

**DEGREES CONFERRED.** B.A., 128; B.Sc., 22; B.Com., 19; M.A., 13.

# OSMANIA UNIVERSITY, HYDERABAD, DECCAN

PATRON—HIS EXALTED HIGHNESS THE NIZAM, G.C.S.I., G.C.B.E.

CHANCELLOR—NAWAB SIR FARIDOON MULK BAHADUR, K.C.I.E.,  
C.S.I., C.B.E. (President, Executive Council).

VICE-CHANCELLOR—NAWAB VILAYAT JUNG BAHADUR.

PRINCIPAL OF UNIVERSITY COLLEGE—A. Siddiqi, M.A. All., Ph.D.  
Gött.

REGISTRAR—H. A. ANSARI, B.A.

CONSTITUENT COLLEGE—Osmania University College.

PROFESSORS, ETC., October 1, 1922

<i>Biology</i>	K. C. Roy-Saksena, M.A. All.	
.....	Prof.	Asst. Prof.

<i>Chemistry</i>		<i>Languages (Ancient and Modern)</i>
.....	Prof.	A. Siddiqi, M.A., Ph.D. Prof.
Choudri Barkat Ali, B.Sc. All.		..... Prof.
	Asst. Prof.	..... Prof.
.....	Asst. Prof.	..... Prof.
i Demr.		Asst. Profs. :

<i>Economics</i>		Syed Ghulam Nabi (Arabic)
.....	Prof.	Abdul Hai (Arabic)
Mohd. Elias Burney, M.A., LL.B.		Syed Ibrahim (Arabic)
All.	Asst. Prof.	Syed Ashraf Shamsi (Persian).
H. Rahman-Khan, M.A., LL.B.		Abdul Hamid Khan (Persian).
All.	Asst. Prof.	Wahiduddin Salim (Urdu)
		Syed Sajjad-Husain, M.A. All.

<i>English</i>		(Urdu).
N. G. Welinkar, M.A., LL.B.		C. N. Joshi, M.A. Bom. (Marathi)
Bom.	Prof.	T. Rama Rao, B.A. Mad. (Ka-
H. Ali-Khan, B.A. Ox.	Prof.	nares)
Asst. Profs. :		R. Subba Rao (Telugu)
Syed Abdul Lateef, B.A. Mad.		Hari Har Shastri (Sanskrit).
S. Hasan, M.A. All. (acting)		..... (Sanskrit).
M. Rahimuddin, M.A. Bom.		

<i>History</i>	[Prof.	<i>Law</i>
Haroon Khan Sherwani, B.A. Ox.		Mahboob Ali, B.A. Ox. Asst. Prof.
.....	Prof.	

<i>Mathematics</i>		
Ibn-i-Hasan, M.A. All.	Asst. Prof.	Quazi Mohd. Husain, M.A. Panj.,
Mohd. Jamilur Rahman, M.A.		B.A., LL.B. Camb. Prof.
Panj.	Asst. Prof.	Amrit Lal Sil, M.A. All. Asst. Prof.

*Philosophy*

.....	Prof.
Khalifa Abdul Hakim, M.A.,	
LL.B. Panj.	Asst. Prof.
Abdul Bari	Ag. Asst. Prof.
.....	Asst. Prof.

*Physics*

	[Prof.]
Wahidur Rahman, B.Sc. Calc.	
Abdur Rahman - Khan, B.Sc.	
Lond.	Ag. Prof.
Nasir Ahmed, M.Sc. All.	Asst. Prof.
i Demr.	

*Theology*

Manazir Ahsan-Gilani Asst. Prof.

**Faculty of Muslim Theology**

.....	Prof.
Asst. Profs. :	
Abdul Qadeer (Islamic Law).	
Sher Ali (Philosophy of Islam).	
Mufti Abdul Lateef (Quran).	
Shah Mustafa Qadiri (Islamic Law).	
Abdul Wasay (Hadith).	
Syed Ahmed Husain (Logic).	
M. Yunus (Quran).	

**GENERAL INFORMATION** (v. also p. 434)

The University was established by a Firman (Order) of H.E.H. the Nizam, in April 1917, but actual tuitional work began in Aug. 1919, with the opening of the College. It differs from the other Univs. of India in that instruction throughout the college courses is imparted through the medium of Urdu, English being taught as a compulsory Second Language, while in other Univs. the medium of instruction is English. The Bureau of Translation which came into existence in Sept. 1917 has provided in Urdu all books required for the Intern. and B.A. examns. The executive government of the Univ. is in the hands of a Council consisting of 11 members. The organization of instruction rests with the Faculties and the Senate, which consists of from 40 to 60 members in addition to the Council, Univ. Profs., and representatives of graduates and Faculties.

**LIBRARY.** 13,000 vols., 500 MSS. The Staff have also access to the large Asafia Library.

**BUREAU OF TRANSLATION.** Curator, Md. Enayatullah, B.A., 15 Translators, Assts. and Advisers. Books published, 32 ; in preparation, 99.

**FACULTIES.** Arts (including Science), Law, and Islamic Theology. Faculties of Education, Engineering and Medicine under consideration.

**TERMS.** July to Dec. and Jan. to April.

**ADMISSION.** The Univ. holds a Matricn. examn. in English, one addl. lang., Hist. and Geog., Nat. Sc. and Maths., but the Matricn. examns. of other Univs., the Senior Oxford and Cambridge Local examns. and the State H.S.L.C. examn. are accepted as equivalent. The B.A. and B.D. courses extend over 4 yrs. with an Intern. examn. at the end of 2 yrs. The Intern. examn. of other Indian Univs. is accepted as equivalent to this. The LL.B. degree can be taken 2 yrs. after the B.A.

**FEES.** Intern.—Rs. 60 p.a. ; B.A.—Rs. 80 p.a.

**RESIDENCE.** 3 hostels attached to the College. Cost of living about Rs. 200 p.a.

**THE YEAR 1921-22**

A site of 1400 acres acquired for buildings, which are estimated to cost over a crore of rupees ; 2 addnl. Asst. Profs. and Librarian appointed ; 3 Asst. Profs. sent to Europe for further study. Law Classes to start in July 1923. Univ. Budget for 1332 Fasli (Oct. 1922 to Oct. 1923), £52,000.

**NUMBER OF STUDENTS** in Arts, 473 ; in Theology, 12.

# THE UNIVERSITY OF THE PANJAB, LAHORE

PATRON—H.E. THE GOVERNOR-GENERAL OF INDIA.

CHANCELLOR—THE GOVERNOR OF THE PANJAB.

VICE-CHANCELLOR AND CHAIRMAN OF THE SYNDICATE—Hon. Sir  
JOHN MAYNARD, M.A. Ox., K.C.I.E., C.S.I., I.C.S.

DEAN OF UNIVERSITY INSTRUCTION—A. C. WOOLNER, M.A. Ox.

REGISTRAR—P. N. DUTT, B.A., R.B.

JOINT REGISTRAR—ISHWAR DAS, M.A., LL.B.

UNIVERSITY PROFESSORS, READERS, AND LECTURERS,  
November 2, 1922

[(U.)=maintained entirely by the Univ.]

<i>Arabic</i>		At Delhi:	
Md. Shafi, B.A. Camb., M.A.		S. N. Mukerjee, M.A. Camb.	
	Prof. (U.).		Lectr.
Sadr-ud-din, D.Litt.	Lectr.	A. T. Banerjee, M.A.	Lectr.
Asghar Ali, M.O.L.	Lectr.	Ram Bihari, M.A.	Lectr.
Md. Ismail, M.A.	Lectr.		
Najm-ud-Din	Lectr.		
<i>Botany</i>		<i>Persian</i>	
Shiv Ram Kashyap, B.A. Camb.,		Md. Iqbal, M.A.	Prof. (U.).
M.Sc., Rai Sahib, I.E.S.	Prof.	K. M. Maitra, M.A. Calc.	Lectr.
S. L. Ghose, M.Sc.	Lectr.	Q. Fazl-i-Haqq, M.A.	Lectr.
H. Das, M.Sc.	Lectr.	M. Ismail, M.A. Calc.	Lectr.
Mehr Chand Sethi, M.Sc.	Lectr.	M. Mohd. Umar	Lectr.
<i>Chemistry, Physical</i>		<i>Sanskrit</i>	
.....	Prof. (U.).	Woolner, A. C., M.A. Ox.	
<i>Chemistry, Organic</i>		P'pal, Oriental Coll. (U.).	
.....	Prof. (U.).	Lakshman Sarup, M.A., Ph.D.	
<i>Economics</i>			Prof. (U.).
W. H. Myles, M.A. Edin.	[Prof. (U.).	Raghubar Dayal, M.A., M.O.L.	
<i>History</i>			Lectr.
.....	Prof. (U.).	Gulbahar Singh, M.A., LL.B.	
<i>Mathematics</i>			Lectr.
C. V. H. Rao, B.A. Camb., M.A.		M. K. Sarkar, M.A.	Lectr.
	Prof. (U.).		
G. S. Chowla, M.A. Camb.	Prof.	<i>Urdu Literature</i>	
Devi Dyal, B.A.	Lectr.	Sh. Abdul Qadir, B.A., K.B.	
S. N. Das Gupta, M.A.	Lectr.		Lectr.
Hem Raj, M.A.	Lectr.	<i>Zoology</i>	
P. Samuels Lal, M.A.	Lectr.	G. Matthai, M.A., I.E.S.	Prof.
A. N. Ganguly, M.A.	Lectr.	Diwan Anand Kumar, M.A. Camb.	
			Reader (U.).

## UNIVERSITY COLLEGES

ORIENTAL COLLEGE, LAHORE. Principal—A. C. Woolner, M.A. Vice-Principal and Prof. of Arabic—Md. Shafi, M.A. Prof. of Sanskrit—Lakshman Sarup, Ph.D. Prof. of Persian—M. Md. Iqbal, M.A. Head Pandit—Siva Datta, M.M. Head Maulvi—M. Najim-ud-din. Head Munshi—Muhammad Din.

LAW COLLEGE, LAHORE. Principal—K. C. Chatterji, B.A., B.L., Vakil (acting). Lectr.—C. L. Anand, M.A., LL.B. Lond., Barr.-at-Law. 4 Part-time Lectrs.

## GENERAL INFORMATION (v. also p. 434)

Established in 1882, the University confined its activities, until recently, mainly to examinations, the control of affiliated institutions, and the provision of instruction in its Oriental and Law Colleges. It has now undertaken the maintenance of Professors and co-ordination of higher teaching in other subjects.

LIBRARY, 55,000 vols. ASTRONOMICAL OBSERVATORY.

FACULTIES. Oriental, Arts, Law, Medicine, Science, Agriculture, Commerce.

DEGREES. B.A., M.A., D.Lit.; B.Sc., M.Sc., D.Sc.; B.Sc. (Agr.), M.Sc. (Agr.); LL.B., LL.D.; M.B., B.S., M.S., M.D.; B.T.; (in Oriental Learning) B.O.L., M.O.L., D.O.L.

*Diploma in Commerce* (2 yrs.' course). In the Faculty of Oriental Learning a 2 yrs.' course from Matricn. leads to an Intern. examn., and further courses of 2 yrs., 1 yr., and 2 yrs. to the B.O.L., M.O.L., and D.O.L. successively. Examns. are also held for Proficiency, High Proficiency, and Honours in Arabic, Sanskrit, and Persian. Honours admit to the Oriental titles: Maulvi Fazil (Arabic), Shastri (Sanskrit), and Munshi Fazil (Persian); and High Proficiency to Maulvi Alim, Visharada, and Munshi Alim. Similar examns. are held in Urdu, Hindi, Panjabi, and Pashto.

The B.T. is open to any one who after graduating in any faculty other than the Oriental has undergone a 1 yr. course at an Affiliated Training Coll. or any trained S.A.V. graduate teacher not less than eighteen months after his passing the S.A.V. examn.

RECOGNITION OF OTHER INSTITUTIONS. An equivalent examn. of any recognized Univ. may be accepted in lieu of Intern. Arts or Science, B.A. or B.Sc., for the purposes of admission to a higher examn.

SCHOLARSHIPS FOR GRADUATES. Several of from Rs. 20 to Rs. 25 p.m. for 2 yrs. in Oriental Studies, Arts, and Science. Research studentships tenable for from 2 to 4 yrs. in Oriental Hist., Sanskrit, Pali or Prakrit, Arabic, Panjabi, Science.

PUBLICATION. *Calendar* (Sept.), Rs. 5/8/0.

## AFFILIATED COLLEGES RECOGNIZED IN DEGREE COURSES

[B.A., M.A., etc.—A., B., C., E., Ec., G., H., M., Ph., Ps., S., Z. = Affiliated up to B.A., M.A., etc. in Arabic, Botany, Chemistry, English, Economics, Geology, History, Maths., Philos., Physics, Sanskrit, Zoology.]



## Medical

LAHORE, *Medical College* (Govt.). M.D., M.S. Class accommodation for 439 Degree students. Principal, and Prof. of *Diseases of Eye, Ear, and Throat*—Lt.-Col. H. Ainsworth, M.B., F.R.C.S. Eng., I.M.S. Other Profs. : *Anat.*—Major P. B. Bharucha, O.B.E., I.M.S. ; *Med.*—Lt.-Col. D. W. Sutherland, M.D., C.I.E., C.M., M.R.C.P., I.M.S. ; *Forensic Med.*—Civ. Surgeon, Lahore ; *Hygiene*—The Asst. Dir. of Public Health ; *Mat. Med.*—Major J. J. Harpur Nelson, I.M.S. ; *Mental Dis.*—Major H. V. W. Cox, I.M.D. ; *Midwifery*—Lt.-Col. G. Tate, I.M.S. ; *Path.*—Lt.-Col. H. M. Mackenzie, I.M.S. ; *Physiol.*—Brevet Major T. A. Hughes, I.M.S.

DELHI, *Lady Hardinge College for Women*. Final Prof. examn. Principal—G. J. Campbell, M.D. Glas.

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LAHORE, *Central Training College* (Govt.). B.T. Principal—H. G. Wyatt, M.A. Oxon. Vice-Principal—J. E. Parkinson, M.A. Camb.

## Agriculture

LYALLPUR, *Agricultural College* (Govt.). M.Sc.Agr. Research Depts. in Agr., Bot., Chem. Principal, and Prof. of *Bot.* and *Economic Botanist*—D. Milne, B.Sc. (Ag.), I.A.S. Prof. of Agr.—H. R. Stewart. Prof. of *Chem.* and *Chem. Adviser to Govt.*—P. E. Lander.

## Arts and Science

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JAMMU, *Prince of Wales College*. M.A.—Ec. ; M.Sc.—G. Principal, and Prof. of *English*—Ramdas Khan, M.A., Ph.D. Yale. *Geol.*—B. K. Bose, M.Sc.

LAHORE, *Dayanand Anglo-Vedic College*. M.A.—Ec., S. 600 resident and 400 other students. Principal, and Prof. of *Chem.*—Lala Sain Das, M.A. Calc., B.A. Camb.

LAHORE, *Dyal Singh College*. M.A.—M., Ph. Principal, and Prof. of *English*—N. Niyogi, M.A. Maths.—Hem Raj, M.A.

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LAHORE, *Government College*. M.A.—A., C., E., Ec., H., M., Ph., Ps., S. ; M.Sc.—B., C., M., Ps., Z. Principal, and Prof. of *Physics*—A. S. Hemmy, M.Sc. Melb., B.A. Camb. Profs. of *Arabic*—M. Sadr-ud-din, D.Litt. ; *Bot.*—Shiv Ram Kashyap, B.A. Camb., M.Sc., Rai Sahib ; *Econ.*—G. D. Sondhi, B.A. Camb. ; *English*—J. R. Firth, M.A. ; *Hist.*—H. L. O. Garrett, M.A. Camb. ; *Maths.*—Gopal Singh Chawla, M.A. Panj. and Calc., B.A. Camb., R.B. ; *Zool.*—G. Matthai, B.A. Camb., M.Sc.

LAHORE, *Islamia College*. M.A.—A., Ph. For Muhammadans. Principal, and Prof. of *Engl.* and *Econ.*—J. L. Wilson, M.A. Profs. of *Arabic*—M. Asghar Ali, M.O.L. ; *Philos.*—Abdul-Hamid, M.A.

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LAHORE, *Kinnaird Girls' College*. Principal, and Prof. of *Econ.*—Miss E. M. Edwards, M.A.

PATIALA, *Mohindra College* (State). No fees. M.A.—M., Ph. Principal—A. K. Sharma, M.A. Prof. of *Maths.*—B. Ram, M.A., LL.B.

PESHAWAR, *Edwardes College*. Principal, and Prof. of *English*—P. W. Stephenson, M.A., B.D.

PESHAWAR, *Islamia College*. For Muhammadans. 6 miles from Peshawar. Residential. Large Collegiate School attached. Principal, and Prof. of *English*—H. Martin, M.A. Ox.

RAWALPINDI, *Gordon Mission College*. Principal, and Prof. of *English*—E. L. Porter, M.A., D.D. Westmr., U.S.A.

SIALKOT, *Murray College*. Maintained by Panjab Mission of Church of Scotland. Principal, and Prof. of *Engl.*—W. Scott, M.A., B.D.

SRINAGAR, *Sri Pratap College* (State). M.A.—M., Ph., S. Principal, and Prof. of *Engl.*—L. MacDermott, B.A.

## THE YEAR 1921-22

BENEFACTIONS. Govt. grant for Chair of Zoology and Chemistry Dept. and for building Chem. Lab. ; Kashmir Darbar donation for Law College.

NEW DEVELOPMENTS. Interm. College for women opened in Lahore.

CHANGES IN REGULATIONS. Options for B.A. and B.Sc. widened.

NUMBER OF STUDENTS appearing for Degree examns. in 1921 and in 1922 in Sansk.—200, 103 ; Arabic—46, 46 ; Pers.—213, 317 ; B.A.—1332, 1406 ; B.A. Hons.—202, 238 ; M.A.—109, 98 ; B.T.—49, 51 ; B.Sc.—93, 146 ; B.Sc. Hons.—53, 86 ; M.Sc.—17, 30 ; LL.B.—207, 315 ; M.B., B.S.—51, 71 ; M.D.—0, 2.

# PATNA UNIVERSITY

CHANCELLOR—THE GOVERNOR OF BIHAR AND ORISSA.

VICE-CHANCELLOR—V. H. JACKSON, M.A. Ox.

REGISTRAR—R. SHAW, M.A. Aberd.

## UNIVERSITY READERS, 1922-23

S. N. Mazumdar-Shastri, M.A. (History, etc., of Pali and Prakrit).	J. N. Samaddar, B.A. (Ancient Indian History, with special reference to Bihar).
P. K. Parija, M.A. (Plant Life and Oxygen).	

## GENERAL INFORMATION (v. also p. 434)

Founded Oct. 1, 1917. Most of the teaching is conducted in the "admitted" Colleges, v. *infra*.

LIBRARY, 4200 vols.

FACULTIES. Arts, Science, Educn., Law.

DEGREES. B.A., M.A., Ph.D., B.Sc., M.Sc., D.Sc., B.Ed., B.L., M.L., D.L.

RECOGNITION of examns. is accorded by Ox., Camb., Dub., Edin., and the General Med. Council.

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## ADMITTED COLLEGES—(a) Admitted to Degree Standard

PATNA COLLEGE. M.A., M.Sc. Principal, E. A. Horne, M.A. St. And. (acting). Professors: *Arabic and Persian*—Azimuddin, Ahmad, Ph.D. Leip. *Chem.*—A. S. Khan, M.Sc. Manc.; K. S. Caldwell, B.Sc. Wales, Ph.D. Leip., M.A. *Econ. and Pol. Philos.*—C. J. Hamilton, M.A. Camb.; H. R. Batheja, M.A. Ox. *Engl.*—J. S. Armour, M.A. Glas.; D. Auchterlonie, M.A. Aberd.; J. C. Banerjee, M.A. *History*—W. Owston Smith, M.A. Ox.; G. S. Bhate, M.A. Edin. *Maths.*—W. W. T. Moore, B.A. Dub.; A. Chatterje. *Philos.*—C. C. Sinha, M.A. *Physics*—A. Mukarji; K. Prasad, B.A. Camb.; K. Dayal, M.Sc. *Sanskrit*—R. Sarma, M.A. 18 other Profs., Lectrs., and Demrs.

CUTTACK, Ravenshaw College. M.A., B.Sc. Principal—H. Lambert, M.A. Camb. Prof. of *Engl.*—P. O. Whitlock, M.A. Camb. Other Profs.: *Botany*—P. Misra, M.Sc. *Chem.*—B. K. Singh; C. Mahanty, M.Sc. *Econs.*—S. C. Bardhan, M.A. *Hist.*—Jadunath Sarkar. *Law*—Syed S. S. Alam, Barr.-at-Law. *Maths.*—S. K. Ganguli, M.A. *Persian and Urdu*—A. F. M. Abdul Kadir, M.A. *Philos.*—M. M. Senapati, M.A. *Physics*—S. C. Tripathi, B.A. Camb. *Sanskrit and Oriya*—K. N. Das, M.A. 22 other Profs., Lectrs., and Demrs.

BANKIPUR, Bihar National College. B.A., B.Sc. Principal, and Prof. of *Philos.*—D. N. Sen, M.A. Other Profs.: *Chem.*—B. K. Chowdhry, M.Sc.

*Engl.*—S. M. Huq, M.A. *History*—H. C. Rai Chaudhary, M.A. *Maths.*—L. K. Ghosh, M.A. *Persian*—A. Sayed, M.A. *Philos.*—G. P. Hazari, M.A. *Physics*—D. K. Bhattacharayya, M.Sc. *Sanskrit*—S. N. Bhattacharayya, M.A. 23 other Profs., Lectrs., and Demrs.

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HAZARIBAGH, *St. Columba's College*. B.A. Principal, and Prof. of *Engl.*—G. C. P. Stevenson, B.D. Dub. Vice-Principal and Prof. of *Philos.*—H. G. S. Kennedy, M.A. Dub. Other Profs.: *Chem.*—H. C. Mukharji, M.A. *Econs.*—P. C. Bose, M.A. *Engl.*—P. K. Nundy. *History*—J. N. Maitra, M.A. *Logic and Ethics*—A. O. Hardy, M.A. T.C.D. *Maths.*—R. N. Mukherji, M.A. *Pers.*—B. D. Singh Choudhury. 4 other Profs.

PATNA *Training College*. B.Ed. Principal—J. H. Thickett, M.A. Camb. Vice-Principal—M. Hashim, M.A., Dip.Ed. Ox. Profs.: Kalika Singh, M.A., B.T.; H. L. Bhattacharji, M.A., B.T.; S. N. Alam, B.A. Camb.

PATNA *Law College*. B.L. Principal—Saiyid Zainuddin, B.L. Profs.: Ragho Prasad, B.L.; S. N. Sahay, B.Sc., Barr.-at-Law; Shiveshwar Dayal, M.A., B.L. 4 other Lectrs.

### (b) Admitted to Intermediate Standard

Patna New College, Bihar Sharif Nalanda College, Monghyr Diamond Jubilee College, Cuttack Ravenshaw Girls' High School, Intern. classes.

## THE YEAR 1921-22

DEGREES CONFERRED. B.A., 209; B.Sc., 25; B.L., 71; B.E., 16.

# UNIVERSITY OF RANGOON

VISITOR—THE GOVERNOR-GENERAL OF INDIA.

CHANCELLOR—THE LIEUTENANT-GOVERNOR OF BURMA.

VICE-CHANCELLOR—Sir R. S. GILES, M.A. Ox., Barr.-at-Law.

PRO-VICE-CHANCELLOR—Sir MARK HUNTER, M.A. Ox., I.E.S., Director of Public Instruction, Burma.

REGISTRAR—A. CAMPBELL, M.A. Edin., I.E.S.

## CONSTITUENT COLLEGES AND THEIR STAFFS, November 6, 1922

### UNIVERSITY COLLEGE

<i>Biology</i>		Bilimoria, J. C., B.A. Bom.,
Meggitt, F. J., Ph.D. Birm. Prof.		Barr.-at-Law. Lectr.
<i>Chemistry</i>		Mya-Bu, Mg., Barr.-at-Law. Lectr.
Peacock, D. H., B.A. Camb.,		Gyi, J. A. Mg., Barr.-at-Law. Lectr.
M.Sc. Lond., F.I.C. Prof.		
Armstrong, W. H. F., M.A. Ox.,		<i>Mathematics</i> [Prof.]
I.E.S. Lectr.		Owen, L. G., M.A. Ox., I.E.S.
Venkateswaran, R., M.A. Mad.		De, K. P., M.A. Calc., I.E.S. Lectr.
	Asst. Lectr.	
Ba, Mg., B.A. Calc., F.C.S.		Haldar, K. P., M.A. Calc. Asst. Lectr.
	Asst. Lectr.	
6 Demrs. and Asst. Demrs.		2 Tutors.
<i>Education</i>		<i>Oriental Studies</i>
..... Prof.		Duroiselle, C., M.A. Prof.
Snow, Mrs. U. H. S., M.A. Ox.,		Cassim, A., B.A. Calc. Lectr. in Pali.
I.E.S. Lectr.		Ba-Kya, Mg., B.A. Calc. Asst. Lectr. in Pali.
<i>English</i> [Prof.]		Akbar, Md. Gulam, M.A. Calc. Lectr. in Persian.
Sloss, D. J., M.A. Liv., I.E.S.		
Luce, G. H., B.A. Camb., I.E.S.		<i>Philosophy</i>
	Lectr.	Ross, G. R. T., M.A., D.Phil. Edin., I.E.S. Prof.
Campbell, A., M.A. Edin., I.E.S.		Saunders, L. P., M.A. Camb., I.E.S. Lectr.
	Lectr.	
Fraser, W. G., M.A. Aberd., I.E.S.		<i>Physics</i> [Prof.]
	Lectr.	Ward, K. M., M.A. Camb., I.E.S.
Ainley, C. W., M.A. Camb., I.E.S.		Aiyar, N. C. Krishna, M.A. Mad., I.E.S. Lectr.
	Lectr.	
4 Tutors.		Basu, R. M., B.Sc. Lond. Asst. Lectr.
<i>History</i>		1 Demr. and 3 Asst. Demrs.
Hall, D. G. E., M.A. Lond.,		
F.R.H.S., I.E.S. Prof.		<i>Political Economy</i>
<i>Law</i>		..... Prof.
May-Oung, Mg., M.A. Camb.,		
LL.M., Barr.-at-Law. Prof.		

## JUDSON COLLEGE

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Chaudhury, R., M.A. Calc. (Pali).

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Gates, G. E., M.A. Harv. (Chem.).

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Iyer, P. P. A. N., M.A. Mad. (P. and Maths.).

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Tapa, James, M.A. Calc.

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Van Horn, C. E., M.A., B.D. Colgate.

Kangyi, Johnson, B.A. Calc.

*Mental and Moral Science and Logic*

St. John, W., B.D., Ph.D. Chic.

Howard, R. L., M.A. Harv., *Principal* of the College.Jury, G. S., M.A. Yale, *Vice-Principal*.

Hla-Baw, Mg., B.A. Calc.

*Physics*, v. Chem.

## GENERAL INFORMATION (v. also p. 434)

This Univ., founded in Dec. 1920, is governed by a widely representative Council consisting of not more than 50 members, which exercises its functions by means of an Executive Committee of 10 members. The Council has the power to reject any act or resolution of the Senate (the academic body of the Univ.) in excess of its powers under the Univ. of Rangoon Act, 1920, and to confirm or reject any resolution presented by it affecting the income or expenditure of the Univ. or of a Constituent College. The Senate consists of the Vice-Chancellor, the Director of Public Instruction, Burma, the Principals of Constituent Colleges, the Professors, 3 members of the Council, and not less than 10 lecturers in constituent colleges. Its executive duties are discharged by a Standing Committee.

An estate of about 450 acres of high and healthy ground, adjoining the Victoria Lakes on the outskirts of Rangoon, has been acquired for the Univ. buildings, which will lie along the margin of the lakes. Both Constituent Colleges and the Halls of Residence attached to them will be accommodated on the estate, where Univ. teachers will be housed and provision made for playing fields, and ample room will still be left for other professional and technical colleges.

LIBRARIES.—University, in process of formation; University College, 10,000 vols.; Judson College, 7000 vols.

DEGREES.—B.A. and M.A.; B.Sc. and M.Sc.; B.Sc.Civ.Engin.; B.Sc. Forestry; B.L.

DIPLOMAS, in Teaching and in Economics and Commerce.

ADMISSION. Ordinarily by Matriculation or a pass in the Anglo-Vernacular High School exam. or the European High School examn. held by Educational Dept. in English, a Vernacular, Maths., and two optional subjects. Proficiency in English must be shown. The Univ. has access to the High School Final examn. results and classes intending students: A class may matriculate; B class must undergo a preliminary year's study which is mostly intensive work in English.

FEES for Examinations: B.A., B.Sc., Rs. 30; B.A (Hons.), B.Sc. (Hons.), Rs. 40; M.A., M.Sc., Rs. 40; B.L., Rs. 40.

## THE YEAR 1921-22

Boards of Studies in Civil Engineering, Forestry, Medicine, Fine Arts and Architecture were constituted with a view to instituting Courses and Examns. in June 1923. Plans were completed for the New Univ. and College Buildings. A University Training Corps was formed (strength 400). Students' Representative Council in process of formation. First Convocation held Nov. 25, 1921. Degrees conferred: D.L. (Hon.), 1; M.A. (Hon.), 1; B.A., 32; B.Sc., 8; B.L., 14.

# THE INDIAN INSTITUTE OF SCIENCE, BANGALORE

PATRON—H.E. THE VICEROY OF INDIA.

DIRECTOR—M. O. FORSTER, D.Sc., Ph.D., F.I.C., F.R.S.

PROFESSORS, ETC., July 28, 1922

<i>General Chemistry</i>	[Prof.	Malandkar, M. A., M.A., B.Sc.	
Watson, H. E., D.Sc. Lond., A.I.C.	Bom.	Asst.	
<i>Organic Chemistry</i>			
Sudborough, J. J., D.Sc. Lond.,	<i>Electrical Technology</i>	[Prof.	
Ph.D. Heid., F.I.C. (Head of	Hay, A., D.Sc. Edin., M.I.E.E.		
Dept. of Genl. and O.C.)	Grundy, E. L., B.Sc., A.M.I.E.E.	Asst. Prof.	
Prof.			
Ramaswamy Iyer, P., M.A. Mad.	<i>Mechanical Engineering</i>		
Asst.	Kann, J. H. C., B.Sc.	Asst. Prof.	
Sanjiva Rao, B., B.A. Mad.			
<i>Bio-Chemistry</i>	[Prof.	<i>French and German</i>	[Lectr.
Fowler, G. J., D.Sc., F.I.C., F.C.S.	Tacchella, C. F. H., M.A. Dub.		

## GENERAL INFORMATION

The object of the Institute, opened July 24, 1911, is to establish Chairs and Lectureships in Science and Arts, especially with a view to the promotion of original investigations and their utilization for the benefit of India, and to provide and to assist in the provision of suitable libraries, laboratories, and all other necessary appliances. Industrial Chemistry is at present the main feature of the Institute.

*Associateships* are awarded for 5 terms (of which there are 3 in a yr.—July–Sept., Nov.–Dec., Jan.–March) devoted entirely to research work and satisfactorily accounted for; also for 3 terms *plus* a period of research elsewhere before or after the period spent at the Institute. *Fellowships* may be awarded to Associates who, having spent 5 yrs. in actual practice, produce satisfactory evidence of original and valuable research work, or other contribution to the advancement of scientific or industrial knowledge. *Certificates* are granted to students who satisfactorily complete approved courses of study. 13 Associateships have been granted.

Students reside in a *Hostel*. Messing charges are from Rs. 28 to Rs. 35 p.m.; rent, lighting, and service, Rs. 10 p.m.

POSTAL ADDRESS : Indian Institute of Science, Hebbal, Bangalore District.  
TELEGRAMS—Science, Bangalore.

THE YEAR 1921–22. *Number of Students and other Workers* : Genl. and Org. Chem.—52; Bio-Chem.—16; Elec. Tech.—15. *Current Expenditure*, Rs. 3,60,668.



# CEYLON UNIVERSITY COLLEGE, COLOMBO

PRESIDENT—THE GOVERNOR OF CEYLON.

PRINCIPAL—R. MARRS, M.A. Ox., C.I.E.

REGISTRAR—Rev. W. S. SENIOR, M.A. Ox.

## PROFESSORS AND LECTURERS, October 1922

<i>Botany</i>		<i>Modern History and Economics</i>	
Le Goc, Very Rev. Fr. M. J.,		Pakeman, S. A., M.A. Camb.	Prof.
O.M.I., M.A. Camb., B.Sc.			
Lond., Ph.D. Rome	Lectr.	<i>Mathematics</i>	
		.....	Prof.
<i>Chemistry</i>		Caspersz, U. D. R., B.Sc.	Lond.
.....	Prof.		Lectr.
Rae, W. N., M.A. Camb., A.I.C.		Gulasekharam, F. H. V., M.A.	
	Acting Prof.	Madras	Lectr.
Chandrasena, J. P. C., Ph.D.		<i>Philosophy</i>	
Lond., D.I.C., A.I.C.	Lectr.	Cameron, D. J., M.A. Ox.	Prof.
<i>Classics</i>		<i>Physics</i>	
Cameron, D. J., M.A. Ox.	Prof.	Grant, A. E., M.A. Ox., B.Sc.	
Senior, W. S., M.A. Ox.	Lectr.	Lond.	Prof.
<i>Economics, v. Modern Hist.</i>		<i>Sinhalese, Sanskrit, and Pali</i>	
<i>English</i>		Suriyagoda, S. S., B.Litt.	Ox.
Smith, Leigh, M.A. Durh.	Prof.		Lectr.
Samarawickrema, W. A., B.A.		<i>Tamil</i>	
Lond.	Lectr.	.....	Lectr.
<i>French and German</i>		<i>Zoology</i>	
Jansz, P. L., M.A. Ox.	Lectr.	Pearson, J., D.Sc. Liv. and Manc.,	
<i>Geography</i>	[Lectr.	F.L.S.	Lectr.
Robison, L. McD., B.A. Vict.			

## GENERAL INFORMATION

As a preliminary step to the formation of a University for Ceylon, the College was established in 1921 by the Ceylon Govt. A College Council of 16 members nominated by the Governor of the Colony advise the Govt. on all important questions connected with higher education.

LABORATORIES. Botany, Chemistry, Physics, Zoology.

TERMS. Oct.—Dec. ; Jan.—March ; May—July.

ADMISSION to the Ordinary courses is restricted to students who have passed the London Matricn. examn. or obtained exemption from it. Others may be admitted to Special courses on payment of admission fee, Rs. 10.

DEGREE COURSES are provided for the B.A., B.Sc. (Economics), of the Univ. of London. By special arrangement the Univ. holds its Honours examn. in Ceylon in Engl., Classics, Hist., Philos., Maths., Chem., and Zool. A Preliminary Scientific course in Physics, Chem., and Biol. is provided for the first-year Med. students of the Ceylon Med. College (*v. infra*).

ORIENTAL LANGUAGES. It is proposed to provide for Courses in Sanskrit, Pali, Sinhalese, and Tamil.

FEES FOR TUITION. Full Course—Rs. 150 p.a. *plus* Rs. 30 p.a. extra for each Science subject offered. Single Subject: Arts—Rs. 15 per term; Science—Rs. 25 per term.

RESIDENCE. Protestants, Roman Catholics, and non-Christians are arranging for hostels under College supervision. Cost of board and lodging, approximately, Rs. 40 p.m.

SCHOLARSHIPS FOR GRADUATES. The Ceylon Govt. offers 3 of £300 p.a., each tenable for 2 or 3 years in a British Univ.—one for Arts, one for Science, and one for Agr. and Forestry. Candidates must have been resident in the Island for 5 years.

THE YEAR 1921-22. *Number of Students*, 166. *Benefactions*: For Prize funds—F. P. Khan, Rs. 6000; Sir ~~B~~\* Arunachalam, Rs. 3000; Peter de Abrew, Rs. 3000.

THE CEYLON MEDICAL COLLEGE, founded in 1870, is recognized by the General Medical Council—*v. Appendix XI. A (b)*. It has a staff of about 26 lecturers and demonstrators and over 200 students.

# KING EDWARD VII. COLLEGE OF MEDICINE, SINGAPORE

PATRON—Sir LAURENCE N. GUILLEMARD, K.C.B.

PRESIDENT OF COUNCIL—A. L. HOOPS, B.A., M.D., D.P.H. Dub.,  
Principal Civil Medical Officer.

PRINCIPAL—G. H. MACALISTER, M.A., M.D., D.P.H. Camb.

## TEACHING STAFF, July 1922

[(P.-T.) = Part-time Lecturer.]

<i>Anatomy</i>		<i>Midwifery and Gynæcology</i>	
Harrower, J. G., M.B., Ch.B.	English, J. S., B.A., M.D., B.Ch.,		
Glas.	Prof.	B.A.O., L.M. Dub.	Prof.
.....	Asst.		
<i>Bacteriology, v. Path.</i>		<i>Pathology and Bacteriology</i>	
		Finlayson, G. A., M.A., M.B.	
		Aberd., M.R.C.P. Lond.	
<i>Biology</i>			(P.-T.).
Scharff, J. W., M.B., B.Ch.,	Choo Teck Guan, L.M.S.		
B.A.O. Dub.	(P.-T.).	Asst. in P.	
<i>Chemistry and Physics</i>		<i>Physics, v. Chem.</i>	
Dent, F., M.Sc. Vict. and Leeds,		<i>Physiology</i>	
Ph.D. Munich, F.I.C. Lectr.		Kay-Mouat, J. R., M.A. Ox., M.B.,	
		B.Ch., D.P.H., M.Sc. Bris.	
<i>Eye Diseases, v. Surg.</i>		King Edward VII. Prof.	
		Lee Keng Soon, L.M.S.	Asst.
<i>Infectious Diseases</i>		<i>Public Health</i>	
Dawson, W., M.B., Ch.B. Glas.,		Brooke, G. E., M.A. Camb.,	
D.P.H. Liv.	(P.-T.).	L.R.C.S., L.R.C.P. Edin.,	
<i>Materia Med., Pharmacy and</i>		D.P.H.	(P.-T.).
<i>Therap., Forensic Med., and</i>		<i>Surgery</i>	
<i>Mental Diseases</i>		Black, K., F.R.C.S. Eng., L.R.C.P.	
Gibbs, H. J., M.R.C.S. Eng.,		Lond., L.D.S., R.C.S. (Lectr.	
L.R.C.P. Lond.	(P.-T.).	in Eye Diseases)	Prof.
<i>Medicine</i>		Smith, C. J., F.R.C.S. Edin.	
Webster, J. S., M.B., B.S., D.P.H.	[Prof.	(Senr. Surgeon, Singapore)	
The Principal Lectr. in Clin. Med.		Part-time Prof.	

## GENERAL INFORMATION

This is a Government institution, partly endowed by public subscription, managed by a Council of Govt. officials and private members, with the Principal Civil Medical Officer as President, advised by a Senate composed of the pro-

fessors and lecturers with the Principal as Chairman. Since its foundation 137 licentiates have passed out.

The *Diploma* in Medicine, Surgery, and Midwifery was recognized by the General Medical Council in 1916—v. Appendix XI.

*Admission* qualifications: (1) The Cambridge School certificate with English (special Malayan paper), Latin (or Classical Oriental Language), and Maths. as compulsory subjects—the standard of a Pass with Credit being required in Engl. and Maths.—and two of the following—Hist., Geog., Chem., Physics, Bot., Expl. Sc., Applied Maths.; or (2) certificates of equivalent standard, e.g. London Matricn., recognized by the General Medical Council as qualifying for registration as Med. students. Candidates must be of good physique (first-class life-insurance standard).

TERMS: Summer—June 1 to Aug. 31; October—Oct. 1 to Dec. 20; January—Jan. 7 to March 25.

Composition FEE for complete 5-year course, covering tuition, hospital tickets, and examns. (except fees for re-examn.), \$700.

RESIDENCE, ETC. Hostel for 72 students. There is a Students' Union.

# UNIVERSITY OF HONG-KONG

PATRON—H.M. THE KING.

CHANCELLOR—THE GOVERNOR OF HONG-KONG.

VICE-CHANCELLOR AND PRINCIPAL—Sir WILLIAM EDWIN BRUNYATE,  
K.C.M.G., M.A. Camb.

CHAIRMAN OF CONSULTING COMMITTEE IN LONDON—Sir CHARLES  
S. ADDIS, K.C.M.G.

REGISTRAR—N. TEESDALE-MACKINTOSH, M.A. Ox.

## PROFESSORS, LECTURERS, ETC., September 15, 1922

*Accounting & Business Practice*  
Messrs. Lowe, Bingham, and  
Matthews, C.A. Lectrs.

*Anatomy* [Prof.  
Shellshear, J. L., M.B., Ch.M. Syd.  
Heanley, C. M., M.B., B.S. Lond.  
Tutor.

*Biology*  
Barney, R. W., B.A. Dub. Lectr.

*Chemistry*  
Byrne, G. T., M.Sc. Manc. Prof.

*Chinese*  
Au Tai Tin Lectr.  
Lai Hsi Chi Lectr.

*Education*  
Forster, L., B.A. Lond. Prof.

*Engineering, Civil and Mech.*  
Smith, C. A. Middleton, M.Sc.  
Birm., M.I.M.E., A.M.I.E.E.  
Dean and Taikoo Prof.

Ring, J., B.Sc. Birm. Lectr.  
Morley, C., B.A. Camb. Lectr.  
Redmond, F. A., B.Sc. Lond.  
Asst. Prof. of Civil E.  
Gittins, W. M., B.Sc.  
Demr. in Civ. E.

Weller, F. C. Lectr. in Mech. E.  
Wong Tai Cho, B.Sc.  
Demr. in Mech. E.

*Engineering, Electrical*  
Roffey, M. H., M.Sc. Prof.  
Day, I., A.M.I.E.E. Demr.

*English* [Prof.  
Simpson, R. K. M., M.A. Edin.  
Fenton, J., Ph.D. Greg. Coll.,  
Rome Lectr.  
Birch, B. G., B.A. Bris. Tutor.

*History* [Lectr.  
Romanis-Lee, J., M.A. Camb.

*Mathematics*  
Brown, W., M.A., B.Sc. Glas. Prof.

*Medicine and Surgery, v. infra*

*Physics*  
Florance, D. C. H., M.A., M.Sc.  
N.Z. Prof.

*Physiology* [Prof.  
Earle, H. G., M.A., M.B. Camb.  
..... Tutor.

*Political Economy*  
Hinton, W. J., M.A. Wales  
Dean and Prof.  
Danaher, M., M.A., LL.B. N.U.I.  
Lectr.

<i>Political Science</i>		<i>Ophthalmology</i> [Teacher.	
Robertson, R., M.A.	Lectr.	Harston, G. M., M.D., D.O. Ox.	
<i>Medicine</i>		<i>Pathology</i>	
<i>Hygiene and Pub. Health</i>		Scott, H. H., M.D., M.R.C.P.	
Woodman, W. J. M.R.C.S.,		Lond., D.P.H.	
L.R.C.P.	Lectr.	Prof. of Special P. and	
<i>Medical Jurispr., v. Path.</i>		Med. Jurispr.	
<i>Medicine</i>		Wang, C. Y., M.D. Edin., B.Sc.	
McKenny, C. W., M.D. Dub. Lectr.		Manc., D.P.H.	Prof.
Aubrey, G. E., M.D. Lond. Lectr.		<i>Pharmacology and Therapeutics</i>	
<i>Obstetrics &amp; Gynaecology</i> [Lectr.		Marriott, O., M.D. Lond.	Lectr.
Forsyth, C., M.D., F.R.C.S. Ed.		<i>Surgery</i>	
Moore, W. B. A., M.R.C.S.,		Digby, K. H., M.B., B.S. Lond.,	
L.R.C.P.I.	Lectr.	F.R.C.S. Eng. Dean & Prof.	
Thomas, G. H., M.D., B.S. Tutor.		Koch, W. V. M., M.D. Edin.	Lectr.
		<i>Tropical Medicine</i>	
		Thomas, G. H., M.D., B.S.	Lectr.

## GENERAL INFORMATION

The College of Medicine for Chinese, founded in 1887 for the training of Chinese students in Western Medicine, was incorporated under the name of the Hong-Kong College of Medicine in 1907. It had no building of its own, and its teaching was conducted by permission in various hospitals and other institutions. Between 1907 and 1910 an Endowment and Equipment Fund of \$1,280,000 was raised for a University to include Engineering and Arts as well as Medicine. The cost of the buildings and preparation of the site—\$345,000—was borne by Sir H. N. Mody, the originator of the Fund. Other contributors were the Govt. of China, the Hong-Kong Govt., Swire & Sons, and other firms and Chinese residents of Hong-Kong, Canton, and other places. The Univ. was incorporated in 1911 and formally opened in 1912, when it took over the work of the College of Medicine. The buildings, including class-room accommodation for 500 students, three hostels, laboratories, etc., together with playing-fields, occupy an area of 25 acres. In 1919 were opened the Schools of Physiology, Tropical Medicine, and Pathology presented by three Chinese gentlemen. "The root idea of the Univ. is to provide a place for Higher Education where Chinese youths can remain under the influence of their own parents and guardians . . . subject to the strong control which Chinese opinion exerts upon young men, instead of being adrift in a foreign country where a liberty unknown to students in the East is allowed to undergraduates" (*Calendar*, 1919-20).

The Court is composed of life, *ex-officio*, and nominated members; the Council of 14-16, including the Chancellor, V.C., Colonial Secy., Univ. Treasr., Deans, Regr., Col. Treasr., Dir. of Educn., 2 Chinese members of Leg. Council, Secy. for Chinese Affairs, Chief Manager in H.K. of H.K. and S.B. Corp., and a representative of the H.K. Ch. of Commerce. The Senate consists of the V.C., Dir. of Ed., Dean of and 1 other representative elected by each Faculty, Regr., and representatives of the H.K. Coll. of Med.

MUSEUM of Pathology and Trop. Med. LABORATORIES: Anat., Bact., Biol., Chem., Histol., Path., Physics, Physiol., Trop. Med.; Applied Mechanics,

Materials, Elec. Tech., Power House, Hydraulics, Steam, Elec. Machinery, Elec. Traction, Engin. and Carpentering workshops. Hospls. in the vicinity available for clinics, 400 beds; Govt. Bacteriological Inst. and Mortuary.

FACULTIES. Medicine, Engineering, Arts.

TERMS. Sept.—Dec.; Jan.—March; April—May.

MATRICULATION examn. (framed for use also as a School Leaving examn.) includes (a) English, (b) Maths., (c) Chinese Lang. and Lit., (d) Latin or a Classical Oriental Lang. other than Chinese, (e) Geog., (f) a Modern Lang. other than English or Chinese, (g) Mandarin, (h) Hist., (i) Physics, (j) Chem., (k) Higher Maths., (l) Trigonometry, (m) Mechanics, (n) Drawing. (a) and (b) are compulsory for all, and (c) for all Chinese candidates. It is necessary to pass in 5 subjects, and for the Med. Faculty these must include (c), (d) or (f), and (e) or (h).

DEGREES. B.A., B.Sc. (Eng.), M.A., M.B., B.S., M.D., M.S., M.Sc. The standard aimed at is that of the Univ. of London. To qualify for admission to the Bachelor's degree examns. residence for 12 (in Med.—15) terms is necessary.

The examn. for the Master's degree may be taken at the end of 2 yrs. after graduation as Bachelor. For the M.A. or M.Sc. a thesis is required; for the M.S., evidence of special post-graduate experience. The examn. for the M.D. may be taken 5 yrs. after graduation, or at the end of 2 yrs. if evidence is produced of special post-graduate experience.

Graduates of other Univs. who wish to become candidates for a Master's degree must work under the direction of the Faculty concerned for at least 1 yr.

A Teacher's *Diploma* may be obtained by pursuing a modified B.A. course or by a 2 yrs.' post-graduate course.

FEES for tuition, \$300 p.a.; board and lodging, \$240; Univ. Union, \$15; books and charges for materials, etc., in Labs., about \$60. It is claimed that there is no European Univ. where a foreign student can live so cheaply.

RESIDENCE. With the object of "developing and forming the character of students of all races, nationalities, and creeds," it is provided by the Ordinance of Incorporation that all students must reside in the quarters provided, or in hostels founded by religious bodies and conducted under regns. approved by the Council.

THE YEAR 1922. *Benefactions*. For endowment of Chairs of Med. and Surg., Rockefeller Foundation, \$500,000. *Honorary Degrees* conferred on H.R.H. the Prince of Wales, Sir Charles Addis, Hon. E. H. Sharp. *Other Degrees*: B.A., 14; B.Sc., 8; M.B., B.S., 8.





## APPENDICES



# I

## REGULAR COMMISSIONS IN H.M. FORCES FOR UNIVERSITY CANDIDATES

*Provisional Regulations (Army Orders for March 1920 amended in 1921 and 1922)* provide for Commissions being granted in the Cavalry, R.A., R.E. (scheme to be reconsidered in Jan. 1924), Infantry, and R.A.S.C., and in the Indian Army. The following Univs., having established approved courses, are empowered to nominate candidates : (a) Oxford ; (b) Cambridge ; (c) London ; (d) Edinburgh and Manchester ; (e) McGill and Sydney. The grant of Commissions in the Indian Army is limited to candidates from Univs. in the U.K. Commissions of accepted candidates will be antedated approximately 1 yr., i.e. to such dates as will give those appointed to the R.A. seniority over the Royal Military Academy cadets, and those appointed to other branches seniority over the Royal Military College cadets, who passed out of those institutions in July or Dec. (as the case may be) of the previous year. In exceptional cases a candidate who has graduated with First-Class Honours may be granted an additional antedate not exceeding 6 months. The commissions of accepted candidates for the R.A.S.C. who have taken a course in Engineering (other than Mining and Metallurgy) will be antedated approximately 18 mos., an additional antedate, not exceeding 6 mos., being allowed in exceptional cases for First-Class Honours ; this arrangement will be reconsidered in Jan. 1924. Commissions of accepted candidates for the R.E. will be antedated, approximately, either 18 months or 1 year, according to the degree held. These antedates will not count for the issue of pay or allowances ; but in all cases in which increase of pay is dependent on the completion of a fixed period of service, service towards increase of pay will be considered as commencing from the date to which the commission has been antedated. The additional antedate for First-Class Honours will count for retired pay, but the ordinary antedate of about 1 yr. will not so count, and no portion of the antedate will count for Indian pension.

The Army Orders mentioned give full details of the requisite qualifications—general, academic, military, and physical. The age-limits are 21 to 25 (Indian Army 21 to 24) on Jan. 15 and July 15 for winter and summer nominations respectively ; special limit of 27 for candidates who were serving on Jan. 1, 1920, or had served prior to that date satisfactorily in R.N., R.M., Reg. Army, S.R., I.A.R.O., Militia, T.F., Overseas Dominions' Forces, or R.A.F., provided they entered Univ. within 6 mos. of demobilization. Candidates must be unmarried and British subjects.

*Air Council Regulations (Air Ministry, June 1922)* provide on somewhat similar lines for the nomination of candidates for permanent commissions in the R.A.F. The max. age is 23 on June 1 of the year of

nomination, or 25 for candidates who have served for at least 12 mos. prior to Jan. 1, 1920, in R.N., R.M., Reg. Army, R.A.F., S.R., I.A.R.O., Militia, T.F., New Armies, or Overseas Dominions' Forces. Preference given to those who have read for a degree in Genl. Engin. Sc., Aero. Engin., Physics, or Maths. Selected candidates will be attached during the long vacation to a Flying Unit for 6 weeks on probation.

Further information as to entry and conditions of service in the R.A.F. is given in Air Publication 904, obtainable from any bookseller or on application to the Air Ministry, Kingsway, London, W.C.2.

## II

INSTITUTE OF CHARTERED ACCOUNTANTS IN  
ENGLAND AND WALES

Incorporated by Royal Charter in 1880. *Address*—Moorgate Place, London, E.C.2.

The *Preliminary* examn. for persons wishing to become Articled Clerks is held in London, Manchester, Birmingham, and Newcastle-upon-Tyne during the first week of June and Dec. It embraces: Dictation and short English Composition, Arith., Algebra and Geom., Geog., Hist., a foreign language (Latin, Greek, French, German, Italian, or Spanish), and one of the following—Advanced Maths., Physics, Chemistry, Geology, Stenography. Exemption is allowed to persons who have passed certain other examns., including those numbered in the list on p. 550, 1, 2, 3, 4, 5, 6, and, provided the standard attained was "pass with credit" in at least 5 subjects, of which one was Maths. (Arith. and Dictation not counting as separate subjects)—7, 8 (*b*), 9, 10, 11, 12, 13; also, if in all the subjects of the Inst.'s Prelim. examn., 14. The minimum age for being articled is 16.

The *Intermediate* examn. for Articled Clerks who have served half of their term of service embraces Book-keeping and Accounts (including Partnership and Executorship Accounts), Auditing and General Commercial Knowledge.

The *Final* examn. may not be taken until 2 yrs. have elapsed since passing the Intern., except that graduates articled for 3 yrs. only may take it 1 yr. after passing the Intern. No person may present himself for the Final unless he has served under Articles in England or Wales to a member for 5 yrs. (or, in the case of a graduate of a Univ. of the U.K., for 3 yrs.). It embraces, in addition to the subjects of the Intern., Principles of Law of Bankruptcy and of Law relating to Joint Stock Companies, Principles of Mercantile Law and of Law of Arbitrations and Awards, and the Rights of Liquidators, Trustees and Receivers, and as an optional subject, either Banking, Currency and Foreign Exchanges, Actuarial Science, or Economics.

The *Fee* for admission to any of the examns. is 2 gs., and for Certif. of Exemption 1 g. Thirty days' notice is required, and late entries will only be accepted up to 15 days on payment of a late fee.

No person may be admitted as *Associate* (fee 10 gs.) who has not passed the Final examn. The minimum age for admission is 21. Any person who, being an Associate, has for 5 yrs. been continuously in practice as a Public Accountant may be admitted as *Fellow* (fee 10 gs.).

## SOCIETY OF INCORPORATED ACCOUNTANTS AND AUDITORS

Incorporated 1885. *Address*—50 Gresham St., Bank, London, E.C.2.  
*Branches* : Glasgow, Dublin, Montreal, Melbourne, Sydney, Cape Town, Johannesburg. Members (numbering upwards of 3500) are designated "*Incorporated Accountants*."

Examinations are held ordinarily in May and Nov. in London, Manchester, Leeds, Cardiff, Glasgow, Dublin and Belfast. 28 days' notice is required. They are also held in Australia and S. Africa.

The *Preliminary* (fee 1½ gs.) embraces English (Hist., Geog. and Grammar), either French or German or Latin, Maths. Exempting examns. : Matricn. of any British, Irish, or Colonial Univ., and those numbered in list on p. 550, 1, 2, 7, 8 (*a*) or (*b*), 9, 10, 11, 12, 13, 18 (Arts or Science), Army Qualifying, or, if it comprise Arith., Maths., Engl., one Lang., and one other subject—9*a* or 10*a* (Hons.), 14, 16 (First-Class certif.), 19, 23.

The *Intermediate* (fee 2 gs.) embraces Book-keeping and Accounts, including Partnership and Executorship and Cost Accts., General Commercial Knowledge and Comm. Law, Powers and Duties of Liquidators, Trustees, etc.

The *Final* (fee 2½ gs.) embraces, in addition to these, Advanced Accounting; Auditing; Merc., Jt. Stock Co. and Bankruptcy Law; Statistical Methods; Economics.

Service under Articles of Clerkship (after passing or obtaining exemption from the Prelim. examn.) is a condition precedent to sitting for the Interim. and Final examns., subject to special regns. in favour of Clerks to Public Accountants of long service (9 yrs. before admission to the Final). The period of service under Articles is ordinarily 5 yrs., for a graduate of a Univ. of the U.K. 3 yrs. Clerks may sit for the Interim. examn. on the completion of 2 yrs.' service under Articles; for the Final during the 5th year.

Admission to *Associateship* (fee 5 gs.) is open to a Public Acctt., Principal Clerk to a P.A., Acctt. in service of the Govt. of the U.K. or India or any Dominion or Dependency, or of a corporation or public body, under certain conditions, who has passed the prescribed examns. Admission to *Fellowship* (fee 10 gs.—for Associates, 5 gs.) is open to a Public Acctt. in the U.K. or Overseas Dominions after continuous practice as such for 7 yrs. (in the case of an Associate, 3 yrs.), provided he has passed the prescribed examns.

*Publications.* *Yearbook*, 3s.; *Journal*, monthly, 12s. 6d. p.a.; *Examn. Questions*, 1s.

## LONDON ASSOCIATION OF ACCOUNTANTS, LTD.

(BY GUARANTEE)

Incorporated Jan. 1905. *Address*—Temple Chambers, Temple Avenue, E.C.4. *Branches*: Liverpool, Manchester, Sheffield, Birmingham, Bristol, Newcastle, Yorkshire, Hampshire and Sussex, S. Wales, Scottish, Belfast, Johannesburg. Members (about 2400) are designated "*Certified Accountants*."

Examinations are held in June and December as follows: the *Preliminary* (fee 1½ gs.); the *Intermediate*, and the *Final*. The last embraces: Practical Accounting and Business Methods; Partnership Accts.; either Ex'ship Accts. or Cost Accts. and Systems of Costing; Jt. Stock Co. Law; Auditing; Liquidation, Trustees, and Bankruptcy; Economics and Statistics; Income Tax Law and Practice. Special paper for Scottish candidates.

For admission to the Assocn. it is necessary to pass the examns. On passing the *Final* a person is eligible for admission as Associate member if he complies with the conditions, requiring 5 yrs.' accountancy experience. Entrance fees: for Associates, 2 gs.; Fellows, 5 gs. The examns. are open to women.

*Publications*. *Yearbook*, 2s. 6d. (including Examn. Papers); *Journal*, 5s. p.a.

## INSTITUTE OF COSTS AND WORKS ACCOUNTANTS

Incorporated 1919 as a Company limited by guarantee with the object, *inter alia*, of securing a definite professional status by means of a system of exams., etc., for persons engaged in occupations requiring knowledge of the cost of production, manufacture or sale of commodities. *Address*—38 Grosvenor Gardens, S.W.1.

Qualifications for membership as Fellow (F.C.W.A.) or Associate (A.C.W.A.): candidates for admission must be actually in practice as Cost Accountants, at least 25 years of age, and of British nationality, and have had 5 years' practical experience; provided that (i.) for Associateship a candidate is eligible who has been for 3 years continuously in practice and (unless exempted by Council) has satisfied the Inst.'s examnrs. at the "*Intermediate*" standard, and (ii.) for either Fellowship or Associateship a candidate, as to whose experience and qualifications the Council is satisfied, is eligible if he has satisfied the Inst.'s examnrs. at the "*Final*" standard.

Persons actually employed in a manufacturing concern may be elected as "*Student*" members. Such members, if they have not already passed the Inst.'s "*Preliminary*" examn. or its equivalent, are required, unless exempted by the Council, to pass this examn. and thereafter the *Intermediate* as a condition of continuing as student members.

Articled Clerks of members of the Inst. are required to have passed or been exempted from the Preliminary examn. and to serve 4 yrs. (a graduate of a univ. of the U.K.—3 yrs.). Exemption from this examn. is granted to graduates of any Univ. of the U.K., and persons who have passed any of certain examns., among which are nos. 1, 2, 3, 4*a*, 8(*a*), 9, 10, 16 of the list on p. 550 and, if taken at or below the age of 16, 9(*a*) and 10(*a*); also examns. for Comml. Certifs. of the Ox. and Camb. Schools Examn. Board, Univ. of Manc., London Chamber of Commerce (Higher) or Manc. Ch. of Com. (senior) or certain other examns.

Subjects of the Prelim. examn. (fee,  $\frac{1}{2}$  g.): Maths., English Essay, Book-keeping, Mechanical Knowledge, and (optional) a Modern Language. Interm. (fee 1 g.): Maths., Economics, Book-keeping, Workshop Knowledge, Costing. Final (fee  $1\frac{1}{2}$  gs.): Maths., Mechanical Knowledge, Law subjects, and Costing.

Entrance fees for Fellows, 4 gs.; Assocs., 3 gs.; Annual subs. 3 gs. and 2 gs. Publications: *The Cost Accountant*, monthly. Examn. Papers, 1s.

## INSTITUTE OF ACTUARIES

Established 1848. Incorporated by Royal Charter, 1884. *Address*—Staple Inn Hall, Holborn, London, W.C.1.

Examinations qualifying for membership are held in May of each year, or at such other times as may be prescribed by the Council. Candidates must give 14 days' notice. Applications for examination outside the U.K. must reach the Hon. Secretaries 2 months prior to the date of examn.

Candidates for *Studentship* must have passed: (1) one of the following examns. (v. list on p. 550)—Nos. 3, 13 (or an examn. similar to 3 or 13 at any Univ. in the Empire), 9, 10, or any other examn. approved by the Council; (2) Part I. of the Institute's own Examn. Syllabus (Advanced Algebra, Finite Differences and Elementary Calculus, and Elements of Statistics).

Candidates for *Associateship* must be "Students" and have passed Parts I., II., and III. of the Syllabus. Candidates for *Fellowship* must be Students or Associates and pass the 4 Parts of the Syllabus. *Examn. Fees*,  $1\frac{1}{2}$  gs. for each Part.

## CHARTERED INSURANCE INSTITUTE

Founded 1897, and incorporated by Royal Charter, 1912. *Address*—11 Queen St., London, E.C.4. Membership consists of the members of Local Insurance Insts., of which there are 35 in the U.K. and one each in Toronto, Adelaide, Melbourne, Sydney, Perth, Cape Town, and Johannesburg. Examns. qualifying for Associateship (A.C.I.I.) and Fellowship (F.C.I.I.) are held in Feb. and March. The former are open to all students. Journal published annually.



## III

## INSTITUTE OF INDUSTRIAL ADMINISTRATION

Founded 1920 to encourage the study of the methods of administration required in industrial undertakings. *Registered Office*—110 Victoria Street, London, S.W.1. Branches at Birmingham and Manchester.

*Examinations* are arranged to be held in 1923 and succeeding years (open to non-members of the Institute), and successful candidates will be given certificates in sections of the full course of administrative subjects. The Diploma of the Institute will be awarded to candidates holding sectional certificates after a Final examination.

A *Journal of Industrial Administration* is published monthly.

## INSTITUTE OF PUBLIC ADMINISTRATION

Established 1922 to develop the Civil Service and other Public Services (both national and local) as a recognized profession, and to promote the study of Public Administration in this and other countries. *Offices*—17 Russell Square, London, W.C.1.

The Interim Council, which includes representatives of the First Division Association, the Civil Service Confederation, Society of Civil Servants, the Institution of Professional Civil Servants, National Association of Local Govt. Officers, etc., has, in addition to the monthly members' meetings for the reading and discussion of papers, organized two series of public lectures, and proposes to arrange for departmental lectures and to co-operate with universities with the object of securing that the science of public administration shall be such a section of university training as to ensure that its study shall in itself be a liberal education and not merely vocational training. It will issue a quarterly *Journal of Public Administration*.

## IV

## NATIONAL AGRICULTURAL EXAMINATION BOARD

Appointed by the Royal Agricultural Society of England (16 Bedford Sq., London, W.C.1.) and the Highland and Agricultural Society of Scotland (3 George IV. Bridge, Edinburgh), and including representatives of the Ministry of Agr. and Fisheries and the Board of Agr. for Scotland.

(i.) An examn. in the SCIENCE AND PRACTICE OF AGRICULTURE is held annually for the National Diploma in Agr. (N.D.A.). Qualifications for admission: a certificate from a recognized Agr. College that his attainments in General Botany and Chemistry, Geology, Physics, and Mechanics justify the candidate's admission; or evidence of (a) having passed the 1st B.Sc. or Interm. examn. in Science of a British Univ.; or (b) having passed examn. No. 9 or 10 (v. list on p. 539), with evidence of having continued study of science for at least a yr., and a certif. in Elem. Chem. and Physics and Botany of Group H of the Oxford Higher Local or in Group E of the Cambridge Higher Local examn.; or (c) Interm. Leaving Certif. of the Scottish Ed. Dept., with evidence of having continued study for at least another year, and the Higher Leaving certif. in Science, including Chem. and Botany. Before the Practical Agriculture Papers are taken, candidates must also produce evidence of having resided on a farm for a period or periods covering a complete year of farming operations. The subjects of the written papers are Practical Agr.; Land Surveying and Farm Buildings; Farm Machinery and Implements; Agr. Chem., Botany, Book-keeping and Zoology; Vet. Sc. They may be taken all at one time or 3, 4, or 5 in one yr. and the remainder the next yr. *Fee* (non-returnable) for entire examn., 6 gs. In 1923 the examn. will be held at Leeds Univ. on April 4 and following days; entries (which should be in prescribed form) close February 24.

(ii.) An examn. in the SCIENCE AND PRACTICE OF DAIRYING is held annually in England and in Scotland for the National Diploma in Dairying (N.D.D.).

Qualifications necessary for admission: (a) at least 6 session months' instruction (not necessarily continuous) in practical dairy work at an approved dairy training institution; also (b) at least 6 months on an approved dairy farm (not concurrent with period mentioned under (a)); also (c) certificates in prescribed form from a recognized institution or institutions, of attendance on approved courses in Chem., Bacteriology, and Botany, and fitness for admission to the examn. The examn. includes tests of practical skill in Dairying and capacity for imparting instruction to others, as well as tests of the candidate's knowledge.

In 1923 the examns. will be at Reading and Kilmarnock on Sept. 7 and 21. Entries (which must be in prescribed form) are receivable at

the addresses given above up to Aug. 11. A candidate may not enter for the examns. both in England and Scotland.

*Examn. papers of past years* may be had at 6d. a set. A detailed syllabus of subjects of examn. is also obtainable.

## NATIONAL POULTRY EXAMINATION BOARD

This Board, formed by the National Poultry Council, includes representatives of the Ministry of Agriculture, the Scottish Board of Agr., Leeds Univ., S.E. Agr. College (Wye), Univ. College, Reading, and several other bodies. The Chairman is P. Hedworth Foulkes, B.Sc., late Principal of Harper Adams Agr. College, Newport, Salop. It holds examns. annually and awards a National Diploma in Poultry Husbandry (N.D.P.).

Qualifications for admission to the Diploma examns. (fee 5 gs.): i. Passing the Board's Prelim. examn. (fee 2 gs.) in Elem. Chem., Physics, Biol., and Maths., or producing other satisfactory evidence, *e.g.* Matriculation certificate, of knowledge of these sciences; ii. Training in Poultry Husbandry in a recognized Teaching Instn. for at least a year; iii. Experience on an approved Poultry Farm for at least a year. The subjects of the examn. are Poultry Husbandry in all branches and, in so far as they relate to this, Agr. and Horticulture, Physiology, Pathology, Chem. and Physics, Building and Appliance Construction, Book-keeping. The next examn. will be held in Sept. 1923.

Applications receivable by the Secy., National Poultry Council, 31 Essex St., London, W.C.2.

## INSTITUTIONS FOR RESEARCH IN CONNECTION WITH AGRICULTURE

THE ROTHAMSTED EXPERIMENTAL STATION, HARPENDEN, HERTS, founded in 1843, is controlled by the Lawes Agricultural Trust (Endowment Fund, £100,000), with which the Incorporated Society for extending the Rothamsted Experiments (founded 1904) co-operates. Annual grants are received from the Ministry of Agriculture, which also gives to the Capital Funds of the Incorporated Society £1 for every £1 raised by it for an approved purpose. The Station includes Institutes of Plant Nutrition and Soil Problems and Plant Pathology, Farm and Experimental Fields, and a Library of 15,000 volumes.

THE NATIONAL INSTITUTE FOR RESEARCH IN DAIRYING, established by the Ministry of Agric. and Fisheries at Univ. College, Reading, in 1912, is governed by a Board consisting of representatives of the Ministries of Agric. and Health, R.A.S. of England, British Dairy Farmers' Assn., Nat. Farmers' Union, etc. Income in 1921-22, £8150, derived from Ministry of Agric. (£6100), Ministry of Health (£800), Nestlé and Anglo-Swiss Condensed Milk Co. (£500), R.A.S.

[Continued on page 505.]

## V

## ROYAL INSTITUTE OF BRITISH ARCHITECTS

Founded 1834. Incorporated by Royal Charter in 1837. *Address*—  
9 Conduit St., Regent St., London, W.1.

The Institute's Recommendations in regard to preliminary and professional education imply a course of professional training in schools occupying at least five years, during the last year of which the student would be working in an architect's office, either as pupil, improver, or assistant—the training being kept under the supervision of the Board of Architectural Education or its delegates during the whole term.

*Registration as Probationer, R.I.B.A.* A candidate must submit a certificate of passing some recognized Public examn., or other evidence of general education, and, unless he has passed an Entrance examn. in Freehand Drawing at one of the recognized Schools of Arch., evidence in the shape of drawings that he has an elementary knowledge of this subject. A list of the recognized schools is given in the following paragraph and particulars regarding them are given in an explanatory Pamphlet on examns., price 1s. Registration fee, 4 gs.

The *Intermediate* examn. (fee 5 gs.), open to Probationers of at least 19 yrs. of age, tests their progress while engaged as pupil, improver, or assistant in an office, and passing it qualifies for registration as *Student, R.I.B.A.* Exemption from this examn. (but not from the fee) may be granted, provided the work done during the session be submitted to and approved by the Board, or has been previously approved by the external examiners, to Probationers who have attended the necessary courses at any of the following schools: Architectural Asscn., London; Universities of Cambridge, Liverpool, London, Manchester, Sheffield; Sch. of Arch., Armstrong College, Newcastle; Leeds Sch. of Art; Sch. of Arch., Technical College, Cardiff; Robert Gordon's Tech. College, Aberdeen; Edinburgh College of Art and Heriot-Watt College; Glasgow Sch. of Arch.; McGill Univ.; Univ. of Toronto; Bombay Sch. of Art. The Institute desires that Students within reach of these Univs. and Schools should avail themselves of the opportunities thus afforded rather than submit themselves for the examn. without such recognized training. Students who have passed with distinction through a full course (on lines approved by the Inst.) in other Dominion, Colonial, or Foreign schools, may, at the discretion of the Board, be recommended for full or partial exemption.

The *Final* examn. (fee 6 gs.) for the *Associateship, R.I.B.A.*, is open to Students of at least 21 yrs. of age. Before admission a candidate must submit for approval designs in answer to at least 4 problems set by the Board. Exemption from the Final examn., with the exception of that portion which deals with Professional Practice, is given to

Students who have completed successfully a 5 yrs.' Diploma or Degree course at the Arch. Asscn., London, Liverpool Univ., London Univ., Manchester Univ., Robert Gordon's Tech. College, Aberdeen, Glasgow Sch. of Arch.

A *Special* examn. (fee 10 gs.) for the Associateship is held in June and Dec. It is open to architects in practice not less than 25 yrs. of age and Chief Assts. over 30 yrs. of age.

*Overseas* examns. (fee 10 gs.). Architects of not less than 25 yrs. of age, working overseas either as architects in practice or as assistants, can be admitted to the Special examn. for Associateship which is held at certain overseas centres. Particulars are obtainable from the Secy., R.I.B.A.; or F. S. Baker, Hon. Secy., R.I.B.A. for Canada, the Traders' Bank Building, Toronto; or Prof. L. Wilkinson, Hon. Sec., R.I.B.A. for Australia, the University, Sydney.

Examns. (fee 3 gs.) qualifying for candidature as *District Surveyor* in London or *Building Surveyor* under local authorities are held in Oct.

*Allied Societies* exist in 22 towns in the U.K., Montreal, Adelaide, Melbourne, Brisbane, Sydney, Perth, Wellington (N.Z.), Cape Town, Durban, Johannesburg, Nairobi.

The R.I.B.A. Henry Jarvis *Studentship*, £250 for 2 yrs., at the British School at Rome, is open only to British subjects who are Associates or Students, R.I.B.A. Information regarding this and other Studentships and prizes is given in a pamphlet, price 6d.

The R.I.B.A. Archibald Dawnay *Scholarships* (for Construction). Two of £50 p.a. for 2 yrs. and one of £25 p.a. for 2 yrs. for students of recognized schools. For details apply for Explanatory Circular.

*Publications* include the *Kalendar*, 3s. 9d., containing, *inter alia*, a historical sketch, regns. for international and other competitions, and information about the allied societies. *Journal*, in 20 numbers annually, 1s. 6d. each number. *Explanatory Pamphlet on Examns.* 1s. and postage. *Past Examns. Questions*, price 1s. 6d. and postage.

## BRITISH INSTITUTE OF INDUSTRIAL ART

Incorporated 1920 under the auspices of the Board of Trade and Board of Education. *Temporary Address*—2 Queen Anne's Gate Buildings, S.W.1.

The Institute undertakes to advise University Authorities on matters connected with the Teaching of Art in relation to Commerce, and has at the request of the Univ. of London drawn up a Report on this subject in connexion with the Commerce Degree (H.M. Stationery Office, 4d.). Subscription, entitling to admission to exhibitions, lectures, etc., arranged by the Inst., and copies of its publications, 1 g.

STRUCTURAL ENGINEERS.—V. p. 516.

## VI

AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE  
OF THE UNITED KINGDOM*Address*—34 Russell Sq., London, W.C.1.

Examinations are held in London annually, usually in March, the Preliminary (fee 1 g.) to qualify for the grade of *Student*, the Intermediate (fee 2 gs.), and Final (fee 3 gs.), or the Direct Final (fee 5 gs.), for the grades of Licentiate, *Associate* (A.A.I.), and *Fellow* (F.A.I.).

The subjects of the *Preliminary* are English Compn., Maths., Geog., Hist. of England, General Knowledge, one foreign language (Elem. Latin, French, Spanish, Italian, or German), and either Shorthand or Elem. Book-keeping. Exempting examns.: Matricn. of a Univ. in the U.K., Prelim. of Law Soc., Surv. Instn., Inst. C.A., Soc. of Inc. Acctts. and Audtrs., Special Army Ed. Certif., London Chamber of Com. (Comml.), those in the list on p. 550, numbered 7, 8 (*a*) and (*b*), 9, 10, 11, 12, 13, 13*a*, 14, 16.

The *Intermediate* is open to Students and Articled Clerks and others who have gained practical experience. Minimum age, 19. Exempting examns.: London B.Sc. (Estate Management) Final, and, as regards some of the subjects, the Intern. B.Sc.; Cambridge B.A. (obtained on completion of Camb. Agric. course).

The *Final* is open to persons who have passed or been exempted from the Intern.; the Direct Final, to persons not less than 25 yrs. of age who fulfil certain conditions as to practical experience. The subjects of the Final are: Valuation, Law of Vendors and Purchasers, Elements of Law of Receiverships and Mortgage, Arbitrations and Compulsory Purchase, Sanitation, Law and Practice of Rating and Taxation, Report Writing, and two out of a list of 6 other subjects. The Direct Final includes also the following from the Intern. list: Book-keeping, Plans and Mensuration, and Law of Landlord and Tenant.

Minimum age for admission to Student grade, 16; Licentiate grade, 19; Associate grade, 25; Fellow, 30. Candidates must also fulfil specified conditions as to practical experience.

Publications: Regns. and Syllabus with list of Text-books and particulars of Prizes and *Scholarships* (value up to £50), 1s. Part of Question Papers, 2s. *Yearbook & Diary*, 10s. 6d.

THE COLLEGE OF ESTATE MANAGEMENT, 35 Lincoln's Inn Fields, London, W.C.2. Incorporated by Royal Charter. Instruction—daytime, evening, and by correspondence—in preparation for the examns. of the Auctioneers' Institute, the Surveyors' Instn., the Land Agents' Society, and the Univ. of London (B.Sc. degree). Principal R. Parry, B.Sc. Lond., F.S.I., F.A.I., A.M.I.C.E., Barr.-at-Law. Directors of studies in Urban and in Rural Science. 16 other Lectrs. and Instrs. 18 Visiting Lectrs.

## THE LAND AGENTS' SOCIETY

*Address*—12 Little College Street, London, S.W.1.

Qualifications for (1) Membership: Having passed the Society's exams. ; being Manager of Agricultural Estates of not less than 2000 acres ; and having been, for at least 2 yrs., professionally employed. (2) Qualified Associateship: Having passed the Society's exams and having had at least 2 yrs.' practical experience other than as a pupil paying a premium. (3) Associateship: Being a Pupil with a Land Agent who is, or is qualified to be, a Member or Qualified Associate.\*

Examinations annually in March. Entries receivable up to Sept. 15. Open to persons eligible for Membership or Associateship. Fee for each Part, 4 gs. Part I. comprises Agric. (Elementary), Surveying, Agr. Law (Elem.), Taxation and charges on Land, Building Constn., etc., Forestry, Book-keeping. Part II. is of an advanced character to test practical knowledge. (Syllabus, 1s.)

*Journal*, 2s. 6d. monthly (members, 1s.).

\* Any person with the practice qualifications required under (1) and (2) is also eligible for election as an Associate.

*Continued from page 501.]*

(£100), Med. Research Council (£300), Univ. Coll. Reading (£350).  
*Address*—7 Redlands Road, Reading.

THE NATIONAL INSTITUTE OF AGRICULTURAL BOTANY, Huntingdon Road, Cambridge, was established in 1919 to improve the yield and quality of farm crops. It is organized in three depts.: (a) Crop Improvement; (b) Official Seed Testing Station, which fulfils the functions formerly performed by the Ministry of Agric.'s Station at Streatham; (c) Potato Testing Station, Ormskirk. A course and examn. in the theory and practice of seed testing will be held in the summer of 1923; fee for course (four to five weeks), £6, 6s.; for examn. £1, 1s. Periodical meetings of Fellows of the Inst. are held for discussion, etc.

V. also pp. 27 (Nat. Fruit and Cider Inst.), 54 (Animal Nutrition), 163 (Agr. Economics), 192 (Plant-breeding), 228 (Animal Nutrition).

## VII

## THE INSTITUTE OF BANKERS

Founded 1879. *Address*—34 Clement's Lane, E.C.4. Local centres in Birmingham, Bradford, Bristol, Leeds, Leicester, Liverpool, Newcastle-on-Tyne, Nottingham, Sheffield. Subscription  $\frac{1}{2}$  g. to 2 gs. p.a.

Qualifications for election to Associateship: (a) 10 yrs.' service in a Banking Establishment, or (b) passing approved examns., or (c) being a graduate of a University and on the staff of a Banking Establishment. Ordinary members are elected from the staff of any Banking Establishment on the Council's list.

*Examinations*, open to members only, (i.) For the Associate Certificate, held in April in London, the provinces, and abroad. Latest entry date—end of Feb. Subjects: Practice and Law of Banking, Economics, Engl. Compn., Comml. Geog., Foreign Exchange; optional—French, Spanish, Italian, Portuguese, German. The examn. is divided into two parts extending over not less than 2 yrs. Examns. *exempting* from Part I. in Practice and Law,—examns. for B. Com. of Bombay with Banking as special subject; in Econs.,—examn. by Prof. Knoop at Univ. of Sheffield. Certain certificates obtainable in Manchester, Bradford, Birmingham, Scotland, and Ireland are also recognized. (ii.) For Diploma in French, Spanish, Portuguese, Italian, and German, held annually in the spring. *Scholarships* entitling holder to spend 2 months in a bank abroad are awarded in connexion with the examns. *Classes* in preparation for the examns. are held by the Inst.

Courses of *Lectures* in Banking subjects are given during the winter in London and some provincial towns. *Library* (lending), 6000 vols. *Journal* monthly, Oct. to June, 1s. 6d. (15s. p.a., post free). *Examn. Questions* (1922), 6d. each part.



## VIII

INSTITUTE OF CHEMISTRY OF GREAT BRITAIN  
AND IRELAND

Founded 1877. Incorporated by Royal Charter, 1885. *Address*—30 Russell Sq., London, W.C.1. *Library* of 3000 vols. *Laboratories*, available for use for examination purposes by other institutions as well as for the I.C.'s own examns. *Appointments Registers* of Fellows, Associates, Registered Students, and Laboratory Assts.

*Studentship*. Minimum age, 16. Annual subs., 10s. A candidate for admission must have passed an approved Prelim. examn. of Univ. matricn. standard in English, Elem. Maths., an approved foreign language, and either a second lang. or one of the following: Higher Maths., Engl. Hist., Geog., Bot., Chem., Geol., Mechanics, Physics, Zool., and must be undergoing a course of preparation and training for the practice of Chemistry in one of the teaching institutions recognized by the Council, or as a pupil of a Fellow of the Institute in a lab. or works approved by the Council. The approved Prelim. examns. include those in list on p. 550, numbered 7, 8 (a) and (b), 9, 10, 11, 12, 13, 13a, 14, 16, 18, 22; in Canada—Matricn. of Dal., McG., Manitt., New Bruns. Univs., and Departmental Arts Matricn. of Queen's and of Univs. and Colls. of Ontario; in Australia—Senior Public examns. of Adel., Syd., and Tasm., First Year in Arts of Adel. and Syd., Matricn. of Melb. and Syd.; in N.Z.—Prelim. of N.Z. and Otago; in S. Africa—Joint Board's Matricn.; in India—Interm. in Arts of Allahabad and Panj., Matricn. of Bom., First Arts of Calc. and Mad.; in Ceylon—Med. Coll. Prelim.; in Malta—Matricn.; in foreign European countries—examns. entitling to proceed to the French B. ès L. and B. ès Sc., and other corresponding Entrance examns. approved by the Council. The candidate should have passed in the compulsory subjects at one examn., but this condition may be relaxed if he has passed them in two.

The institutions recognized for the training of candidates for the Examns. of the I.C. are those in connexion with the Univ. of London shown on pp. 89, 90—(U.), (K.), (Im.), (Bk.), (EL.), (2), (5), (8), (10) (evening), (11), (28) (Chem. and Botany), and East Ham Tech. Coll. (for first 3 years of an evening course); in the Univ. of Durham, Armstrong Coll.; Constituent Colls. of Wales and of N.U.I.; all other Univs. in the U.K.; Univ. Colls. Nottingham, Reading, and Southampton; Birmingham and Blackburn Munic. Tech. Schools, Bradford City Tech. Coll., Huddersfield Tech. Coll., Leeds Central Tech. Sch., Salford Royal Tech. Inst., Cardiff Tech. Coll., R. Tech. Coll. Glasgow, Heriot-Watt Coll., Paisley Tech. Coll., R.C.Sc.I.; Overseas Univs.—McGill, Queen's Univ. (Ontario), Toronto, Adel., Melb., Syd., W. Aust.,

Univ. of N.Z., Cape Town, Univ. of South Africa—Constituent Colls., Stellenbosch.

The compulsory subjects of training are Chem., Physics, and Maths., the course in Chem. extending over 4 yrs. Evening class training is recognized if the candidate is engaged in the practice of Chem. during the day and attends a systematic course previously approved by the Council extending over 5 yrs., and is recommended by his teachers. Evidence of having passed the class or other examns. is required.

The A.I.C. examn. in General Chemistry (inorganic, organic, and physical), fee 5 gs., occupies at least 5 days, including 4 days of practical Chemistry, and is open to students who have completed the prescribed training or have obtained a degree including the necessary subjects, and worked for a further year in a recognized Univ. or Coll., or for 2 yrs. with a Fellow in a lab. or works approved by the Council, or have been otherwise trained to the satisfaction of the Council and been engaged in the study and practice of Chem. for 10 yrs. The A.I.C. may be granted (without examn.) to graduates with 1st or 2nd Class Hons. in Chem., or holders of diplomas recognized as equivalent, who have completed a 4 yrs.' course in the requisite subjects or a 3 yrs.' course supplemented by approved experience in a lab. or works approved by the Council. The examns. recognized for this purpose include, in addition to examns. of all Univs. of the U.K.: Final B.Sc. with 1st or 2nd Class Hons. in Chem., of McGill, Toronto, Adelaide, Melb., Syd.; the Final M.A. of the Univ. of Cape Town with Chem. as principal subject, and the Final B.A. of Toronto with 1st or 2nd Class Hons. in the graduating Dept. of Chem. and Mineralogy. Applications from candidates having diplomas of a specialized character will be decided on their merits. Entrance fee, 2 gs. Annual subsn., 1½ g.

The F.I.C. examn., fee 10 gs. (for Associates, 5 gs.), occupies at least 5 days in any one of the following branches: Inorganic with Sections, Mineral Products, Metallurgy, Manufactured Products; Physical; Organic; Agricultural; Foods and Drugs and Water; Bio-Chemistry; Chem. Engineering. It is open to Associates of 3 yrs.' standing, and in special cases to other candidates who have been systematically trained and had considerable experience. The F.I.C. may be granted without examn., or with a modified examn., to Associates of 3 yrs.' standing who have carried out original research or devised processes or inventions or given other sufficient evidence of knowledge and ability. Entrance fee, 5 gs. Annual subsn., 2 gs.

Arrangements have been made between the Board of Education and the Institute for the award of national certificates in chemistry to students in technical schools and colleges in England and Wales (Rules 100, 1921, 2d.). Under this scheme the Institute in conjunction with the Board approves schemes of training submitted by the technical schools or colleges, for the award of certificates for part-time and full-time grouped courses, including in addition to chemistry suitable courses in physics, mathematics, and cognate subjects. Courses for Part-time Course certifs. are designated *Senior* for the Ordinary and *Advanced* for the Higher certif. Courses for Full-time Course certifs. are suitable for students who have attended a Secondary

School up to the age of 16 yrs., and extend over at least 3 yrs. for the certif. in Chem., and at least 1 yr. for the certif. in Applied Chem. They include physics, maths., and one or more modern languages, and may include other cognate subjects. Certifs. are awarded in Chem. and in Applied Chem. Admission to the course in Applied Chem. is restricted to students who have satisfactorily completed a full-time course in chemistry, or other course approved by the Inst. and by the Board.

The Council of the Inst. will consider at a later date whether and how far the training and the Higher certifs. should be recognized as qualifying for admission to the examn. for its Associateship.

*Publications.* *Register of Members*; *Regs. for Admission*; *Examn. Papers*, 1s. a set; *List of Official Chemical Appointments*, 5th edition, Jan. 1923, 3s. net; *Journal and Prods.*, 6 parts annually, 2s. each; *History of Inst.*, 15s.; *Lectures* (monographs on various industries—Branches of chemical practice, etc.) at various prices.

## CHEMICAL SOCIETY

*Address*—Burlington House, London, W.1. Professional qualification not required. Entrance by ballot; fee £3, annual subs. £3. Library, 26,000 vols. Lectures. Monthly Journal. Annual vol. of Reports by eminent men on recent progress. Research Fund from which grants are made (in 1921 they amounted to £629) for purchase of special materials for research.

## IX

## INSTITUTION OF CIVIL ENGINEERS

Established 1818. Incorporated by Royal Charter, 1828. *Address*—Great George St., Westminster, S.W.1. *Telegrams*—Institution, London.

Examinations, (i.) Preliminary and (ii.) Associate Membership, are held annually in April and Oct. in London. Entries receivable up to Feb. 28 and Aug. 31. The April Prelim. and Oct. A.M. may also be held, the former in Manchester, Glasgow, and Newcastle-upon-Tyne, the latter in the King's Dominions overseas. (i.) may also under certain conditions be held overseas.

For admission to (i.) nomination by a corporate member is necessary, and conditions relating to practical training have to be fulfilled. It includes English, Maths., and 2 (which must not both be languages) of the following subjects: Elem. Chem., Elem. Mechanics, Elem. Physics, Latin, Greek, French, German, Ital., Span., Port., Dutch, Hindustani, Russian.

Admission to (ii.) is open to (a) *Students* of the Instn. (v. *infra*) of at least 1 yr.'s standing between ages 21 and 26, and (b) persons of at least 25 yrs. of age who have passed or are exempt from (i.) and are in other respects qualified (in respect of training, experience, etc.) for election into the Instn. It includes papers in (A) Mechanics, Strength and Elasticity of Materials, *either* Theory of Structures *or* Theory of Elec. and Magn.; (B) 2 out of 9 other subjects; and (C) Engin. Drawings, Specifications, and Quantities, and, unless candidate has previously qualified therein, a modern Foreign Lang.

For admission as *Student* age must be between 18 and 25, and candidate must be recommended by a corporate member under whom he is or has been in course of preparation and training in accordance with the Instn.'s prescriptions. A candidate for election as *Associate Member* must satisfy the Council as to his training and experience, and must, unless exempted, pass (i.) and (ii.). Exemption from (i.) is granted to graduates of any Univ. of the Empire, and Whitworth Scholars and, subject to certain provisos, persons who have passed any of examns. (v. p. 550) Nos. 3, 4 (Engin.), 8a, 8b, 9, 10, 11, 13a, 13b, 14, 15a (Engin.), 15b (Engin.), 15c, 17, 18, 19, 20 (Engin.), 21, 22, or Matricn. (Engin.) of McGill, or certain Entrance examns. of the Australasian Univs., or combined Matricn. and First Year's examns. of Univ. of S. Africa or of Cape Town. Exemption from sections (A) and (B) of (ii.) is granted for the following degrees if taken after 3 yrs.' study in the several Univs. in accordance with their regns.: Oxford B.A. with Hons. in Engin. Sc., Final Hons. Sch.; Camb. B.A. Hons. Mech. Sc. Trip.; Edin., Glas., or St. And. B.Sc. in Engin.; Dub. B.A.I. with Hons.; B.Sc. or B.Eng. with Hons., Birm., Brist., Leeds, Liv.,

Lond., McG., Manc., Sheff.; also subject to further provisos certain other degrees of Adel., Belf., Birm., Brist., Cape Town, Dub., Durh., N.U.I., Leeds, Liv., Lond., McG., Manc., Melb., N.Z., Queensland, Sheff., S. Africa, Syd., Wales. No exemption from section (C) is allowed.

*Publications.* *Report on Methods of Educn. and Training of all Classes of Engrs.*, 1906, Wm. Clowes, 94 Jermyn St., S.W.1, post free, 11d.; *Report of Confce. on Educn. and Training*, June 1911; Reports on Technical Subjects.

## INSTITUTION OF ELECTRICAL ENGINEERS

Founded 1871. Incorporated by Royal Charter 1921. *Address*—Savoy Place, Victoria Embankment, London, W.C.2. *Telegrams*—Voltampere, Phone, London.

Examinations are held in London and other centres in Great Britain about the end of April and the end of Oct. of candidates for *Associate Membership*. Applications should reach the Secy. not later than March 1 and Sept. 1 respectively. Examns. may also be held abroad at the discretion of the Council. Part I. of the examn. includes English essay or translation into English from French, German, Italian, or Spanish; Applied Mechanics; and either General Elem. Physics or Chem. Part II. consists of papers on technical subjects only.

A candidate for the Associate Membership is required, unless exempted, to pass the examn. or to present a thesis, paper, or other contribution to Electrical knowledge. He must also be at least 25 yrs. of age or have been a student of the Institution for at least 3 yrs., must be engaged in one of the branches of El. Eng., and satisfy the Council as to his experience, etc.

Exemption from Part I. of the examn. is granted to candidates who have passed an Intermediate examn., including maths. and physics, of any Univ. in the U.K. or Colonies, or Whitworth Exhibition, and exemption from the whole of the examn. to persons who have obtained: any Engin. degree of any Univ. in the U.K. or the Colonies; Whitworth Scholarship; Diploma in Engin. of R.C.Sc.I. or Hons. Sch. of E.E. of Univ. of Liverpool; Diploma or Certif. in E.E. of the City and Guilds (Engin.) Coll., or King's Coll., London; Diploma in E.E. of Univ. Coll. London, Faraday House, Heriot-Watt Coll. Edin., Roy. Tech. Coll. Glas., Armstrong Coll., Technical Coll. Bradford, S. African Coll.; Day Course certif. in E.E. of Finsbury Tech. Coll.; 4 yrs.' Engin. Course certif. of Northampton Polyt. Institute, London; Certif. of Technology in E.E. of Manc. Municipal Coll. of Tech. or Inst. of Science, Bangalore, India. The Final or Hons. grade certif. in E.E. of the City and Guilds of London Institute exempts from Part II.

*National Certificates and Diplomas* are awarded by the Institution and the Board of Education jointly on lines similar to those for Mechanical Engineers, v. *infra*.

## INSTITUTION OF MECHANICAL ENGINEERS

Established 1847. *Address*—Storey's Gate, St. James's Park, London, S.W.1. *Telegrams*—Mech. Parl., London.

Examinations are held in London in April and Oct.: (i.) *Studentship* (minimum age, 16), including papers in English, Elem. Maths., and Scientific Knowledge (Mechanics and either Physics or Chem.). (ii.) *Associate Memberships*, open to students of the Instn. (minimum age, 20), or candidates for Graduateship over 21 and under 30 who intend to become Assoc. Members, and for whose regular training as M.E.'s satisfactory arrangements have been made, or other candidates (minimum age, 27) duly proposed for election and permitted to take the examn. The examn. includes a short essay paper, Applied Maths., Physics and Chem., Technical Knowledge, and a Modern Lang.

A candidate for election as *Graduate* must, unless exempted (*see below*), have passed examn. (ii.), and have received or be receiving regular training as a Mechanical Engineer, and have received or intend to obtain sufficient practical and scientific training to fit him for employment in a responsible position. Minimum age, 21.

A candidate for election as *Associate Member* must be a practising Engineer at least 27 yrs. of age. The passing of the A.M. or equivalent examn.<sup>1</sup> is an indispensable qualification up to the age of 33, and he must, in addition, have been regularly trained as a M.E. and have had sufficient practical experience in the direction or design of Engineering work.

Examns. exempting from (i.): Graduateship of any Univ. in the Empire; any of those on p. 550 numbered 3\*, 4 (Engin.), 5, 6 (provided either Mechanics or Chem. is covered by the Certif.), 7 (provided it has been taken by an Internal student of Birm., Leeds, Liv., Manc., or Sheff., and a Pass with Credit obtained in Engl. Comp. and Lit., Maths., and 2 of Mechanics, Physics, Chem.), 8 (a) (provided candidate passed in Physics either as a Group or as a Subsidiary subject—not in combination with Chem.), 9 or 10†, 11 (if covering requisite subjects of Graduateship examn., v. *supra*), 13‡, 13 (a)\*, 14†, 15 (a) (Engin.), 15 (b) (Engin.), 15 (c), 17 (provided a foreign language was taken), 18, 19†, 20 (Engin.), 21 (if including English, Hist., Geog., Maths., and either Nat. Philos. or Physics), 22; Matricn. (Engin.) of Birm., Liverpool, or Hong-Kong; S. Africa Matricn.; Instn. of C.E. Studentship; Naval Cadets passing-out; Whitworth Scholps. and Exhibns.

Examns. exempting from (ii.): Engineering Degrees of any Univ. in Gt. Britain (including War B.Sc. (Eng.) Lond.), Ireland, British Dominions, or India, except such as may be specifically excluded; Camb. B.A. Hons. in Eng. and, if Spl. examns. in Eng. Sc. and in either Chem. or Physics were passed, the ordinary B.A.; Manc.

\* If the certif. covers Mechanics or Chem. or Physics or Drawing.

† If the certif. covers a physical science subject.

‡ If the certif. covers Elem. and Adv. Maths., Hist., and Geog. and either Mechanics or Chem. or Elem. Physics.

Certif. in Technology, Mech. or El. Eng.; Eng. Degree of a Foreign Univ. if recognized by the Council; Diploma in Eng. of Univ., King's, or City and Guilds (Engin.) Coll., London; Dipl. or Higher Certif. (3 yrs. course) of City and Guilds of Lond. Inst. if taken by matricd. student; Final Dipl. in Mech. or El.E. of R.T.C., Glas., if approved Matricn. examn. passed before beginning course; R.N. examn. qualifying as Lieut. (E.); R.N. College Prof. Certif. for Constructors; Inst. C.E., Assoc. M.; Whitworth Scholps. and Exhibns.

*National Certificates and Diplomas* are awarded by the Institution in conjunction with the Board of Education to students of approved Technical Schools and Colleges (v. Board of Education, Rules 106, 1921, 1d.). Certificates are awarded in respect of part-time and Diplomas in respect of full-time grouped courses. Part-time courses are classified as *Senior* or *Advanced*, the latter aiming at reaching within the limits of the subjects covered by them the standard of University work. Full-time courses are also classified as *Senior* (for Secondary School students aged 16) and *Advanced* (for Secondary School students aged 17 or 18 or students who have been for 2 yrs. in regular employment with concurrent instruction at senior or advanced part-time courses). The courses must extend over at least 2 yrs. and the senior part-time course should normally extend over 3. The Certifs. and Diplomas relating to Senior and advanced courses respectively are known as *Ordinary* and *Higher*.

## ROYAL AERONAUTICAL SOCIETY

Founded 1866. *Address*—7 Albemarle St., London, W.1.

Membership is of two categories—technical (Students, Associate Fellows, and Fellows) and non-technical. *Associate Fellowship* (A.F.R.Ae.S.) is reserved for those who have attained to an acknowledged position in the science of aeronautics; *Fellowship* (F.R.Ae.S.) for those who have attained to considerable eminence. Annual subsn. 1 g., 4 gs., and 6 gs., according to class. Entrance for Assoc. Fellows and Fellows, 3 gs. and 5 gs. *Library*, including large recent acquisitions due to grant from Carnegie U.K. Trust, available to non-members through the medium of the Central Library for Students, 9 Galen Place, W.C.1. *Lectures*, fortnightly in winter. *Publications*, "Aeronautical Journal" and "Transactions."

## INSTITUTION OF AUTOMOBILE ENGINEERS

Incorporated 1907. *Address*—28 Victoria St., Westminster, S.W.1.

Qualifications for (1) Ordinary Membership (M.I.A.E.): minimum age 25; having occupied during a sufficient period a responsible position in connexion with the practice of, or otherwise proved thorough knowledge of theory and practice of Automobile Engineering; (2) Associate Membership (A.M.I.A.E.): min. age 23; having been trained

as Engineer and subsequently employed for at least 2 yrs. in practice and science of A.E. and being actually so engaged. Persons suitably qualified may also join as graduates, associates, or honorary members. Annual subsn. 1 g. to 3½ gs. according to class. Prizes up to £25 for Papers by Graduates.

## THE INSTITUTE OF MARINE ENGINEERS, INCORPORATED

Established 1889. *Address*—85 The Minories, Tower Hill, London, E.1.

Membership open to Engineers holding First or Second Class Sea-going certificates or those holding responsible or qualifying positions and engaged in the science or practice of Engineering or shipbuilding; Associateship, to persons so engaged and at least 21 years of age; Graduateship, to those receiving training in such science or practice who have completed one year of such training; Student Graduateship, to those who have attended Technical classes for a year, are training for such science or practice, and have passed the Institute's examn. The examn. (fee, 2s. 6d.) is held in London and the provinces in May in the following subjects; Theoretical Mechanics, Heat and Heat Engines, Machine Constn. and Drawing, Applied Mechanics, Maths., English, Elec. Engin. Entrance fee and annual subsn., 5s. to £1:11:6 according to grade of membership.

Library (over 3000 vols.) and Reading Room. Lectures during winter session. Gold Medal and other awards for Essay competitions.

*Lloyd's Register Scholarships*: Three of £100 p.a. tenable for 3 yrs. in a University or College (day classes), open for competition, by examn., to British subjects, aged 18-23, who are Graduates or Associates of the Inst., apprentices or junior engineers, not necessarily connected with the Inst., who have served at least 2 yrs. in a commercial engineering workshop and until the time of application have been employed at engineering either ashore, afloat, or at College with a view to entering upon the business of Marine Engineering. The examn. is held about end of June each year in various centres to suit the residences of candidates in Great Britain.

## INSTITUTION OF NAVAL ARCHITECTS

Founded 1860. Incorporated by Royal Charter 1910. *Address*—5 Adelphi Terrace, London, W.C.2.

Principal qualifications for Membership: minimum age 30; having served apprenticeship in naval architecture or marine engineering and subsequently been engaged in such occupation and having held a post of primary responsibility for 5 yrs. or more. Qualifications for Associate Membership are similar, but minimum age is 25 and post of primary responsibility need not have been held. Age-limit for Associates 25,



students 18-25. Entrance fee and annual subsn., 2 gs. each, except for students, who pay subsn. 15s. p.a. and no entrance fee.

*Scholarships* in naval architecture and marine engineering: upwards of 15, varying in value from £75 to £150 p.a., offered for competition open to students and apprentices in firms engaged in shipbuilding industry and Royal dockyards; two for post-graduate research in naval architecture (value £250 p.a. and £150 p.a. respectively) are awarded on recommendation of Univ. authorities.

Annual meetings, when papers are read and discussed. Summer meetings at shipbuilding centres at home or abroad.

Library, over 4000 vols., comprising principal works on shipbuilding, ancient and modern. Transactions, issued annually, constitute a permanent record for past 60 yrs. of all important developments in shipbuilding and marine engineering: £3:3s. for current volume (issued free to members), £3:3s. to 10s. 6d. for earlier numbers. Total membership about 2800, including many foreign naval architects of eminence.

## INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS

Founded 1873. Incorporated 1890. *Address*—92 Victoria Street, London, S.W.1.

*Qualifications for Membership* (M.Inst.M. and Cy.E.): minimum age 25; either (a) holding a permanent chief appointment as an Engineer or Surveyor under a Municipal Corporation or other such Public Authority, or (b) holding a permanent appointment as Deputy Engineer or Surveyor or the like and having passed the examn. of the Instn. or the A.M.I.C.E. examn. or obtained equivalent Degree or Diploma or satisfied the Council that he possesses equivalent professional ability and experience. *Qualifications for Associate: Membership* (A.M.Inst.M. and Cy.E.): minimum age 22; having undergone a recognized course of instruction as Civil Engineer and Surveyor and holding a position as Engineer Asst. or Resident Engineer or the like under a Public Authority; and having passed the examn. of the Instn. or satisfied the Council that he has equivalent engineering qualifications or experience. A candidate for election as student (age-limits 18 to 24) must be undergoing or have undergone a regular course of training as an articulated pupil to or hold an approved appointment with an Engineer or Surveyor to a Public Authority.

Entrance fee for Member and Assoc. Member, 1½ g., £1:5s.; subsn., 2 gs., 1½ g. Student's subsn., 1 g.

Examinations are held in London in April and Oct. Examns. are also held in Scotland, Ireland, India, S. Africa, and other parts of the Empire. Applications receivable up to Jan. 1 and July 1. Three certificates are awarded: (a) Testamur for general proficiency in work of a local govt. engineer and surveyor; (b) certificate in Town Planning; (c) certificate in County and Highway Engineering for specialized

knowledge of road and bridge engineering and highway management and administration.

Qualifications for admission to the examns.: minimum age 21; certificate of having passed the matricn. examn. of some University in the British Empire or an Examn. of similar standard approved by the Council; fees—(a) 4 gs., (b) or (c) 1½ or 3 gs.

Inquiries about examns. in India and S. Africa may be addressed to M. Lea, Chief Engineer, Municipal Office, Karachi, India, and T. W. Stainthorpe, Irrigation Dept., P.O. Box 399, Pretoria, Transvaal, respectively.

*Publications.* *Journal*, fortnightly, 2 gs. p.a.; Town Planning Conference 1913, 10s. 6d.; Handbook containing lists of Members, Regns., etc., 2s. 6d.; and several others.

## INSTITUTION OF STRUCTURAL ENGINEERS

Founded 1908, and incorporated 1909 as “The Concrete Institute.”  
*Address*—Denison House, Vauxhall Bridge Road, London, S.W.1.  
*Telegrams*—Coninst, Churton, London. Branches: Lancashire and Cheshire, Western Counties. To be formed in 1923: Birmingham, Leeds and Bradford, Glasgow and Edinburgh, Calcutta and Bombay, Johannesburg, and Christchurch, New Zealand.

Admission to the class of Member is open only by examn., through the Graduate and Associate-Membership classes. Admission to Associateship is direct, but candidates must be Fellows either of the R.I.B.A. or Society of Architects, or must be of equivalent professional standing.

*Publications*: *Journal*, monthly, 2s. 8d. post free; Yearbook, 3s. 8d. post free; numerous books on technical subjects.

## X

## THE BAR IN ENGLAND AND WALES

THE right to practise as a Barrister in the Law Courts of England and Wales is restricted to those who have been called to the Bar by one of the Inns of Court—Lincoln's Inn, Middle Temple, Inner Temple, and Gray's Inn. The consolidated Regulations of these Societies (obtainable from the *Council of Legal Education*, 15 Old Square, Lincoln's Inn, London, W.C.2) provide, *inter alia*, as follows :

*Admission of Students.* The conditions include : (i.) having passed any examn. held by any Univ. in the British Dominions, approved by the Council of Legal Educn., which entitles to a degree or, provided that one of the subjects in which the Student has passed is Latin, one of certain other examinations approved by the Council of Legal Education ; (ii.) satisfactory evidence of good character ; (iii.) declaration that the candidate will not "directly or indirectly apply for or take out any certificate to practise, directly or indirectly, as a Pleader or Conveyancer or Draftsman in Equity, without the special permission of the Masters of the Bench," and is not and does not "directly or indirectly act in the capacity of a Solicitor, Attorney-at-Law . . . Professional Accountant, Actuary, Land-Agent, Surveyor . . ." or "in any capacity similar to any of those . . . otherwise than as. . . ." The Schedule of approved Prelim. examns. includes those numbered in the list on p. 550, as 1, 2, 3, 5, 6, 8 (a) (b), 9 or 10 (subject to provisos), 18 (according to standard applicable to students whose native language is English), 20, 21. The Council may add others, and the Masters of the Bench of the Inn of Court concerned may, in special cases, relax or dispense with this requirement.

*Keeping Terms.* This is done by eating dinners 6 days in each of 12 terms (members of Univs. of the U.K. 3 days). There are 4 terms in each year.

*Education and Examination.* Systematic instruction is provided under the supervision and direction of the Council of Legal Education in Roman, International, Constitutional, and English Law, Jurisprudence, Legal History, and Equity. Reading in the chambers of a Barrister or Pleader for the purpose of studying the practice of Law is recommended, but not compulsory. Four examns. for Call to the Bar are held each year. Candidates must satisfy the examiners in each of the sections : (1) Roman Law, (2) Constitutional Law (English and Colonial) and Legal History, (3) Criminal Law, (4) Real Property and Conveyancing or Hindu and Mohammedan Law or Roman-Dutch Law, (5) Common Law, (6) Equity, (7) Law of Evidence and Civil Procedure, (8) General Paper on 5, 6, and 7. A student who has passed an examination in Roman Law, forming part of a qualifying examination for a

Univ. degree, may be excused the examination in Section 1. Sections 1 to 4 (constituting Part I.) may be taken separately (fee,  $\frac{1}{2}$  g. each); 5 to 8 (the Final examination) must be taken together (fee, 2 gs.) after having passed 1 to 4 and, ordinarily, after having kept at least 6 terms.

The successful students are classified and the names of those in Classes I. and II. of the Final Examination Pass List are arranged in order of merit. A Certificate of Honour is granted to those in Class I. at the Final examination. Prizes of £50 each may be awarded for the best students (not over 25 yrs. of age) in Sections (2) and (3), and a Studentship of 100 gs. p.a. tenable for 3 yrs. to the best student (not over 25 yrs. of age) at the Final examination (during the years 1921 and 1922 the age-limit will be 30 instead of 25). The Inn to which a student who has obtained a Studentship or Certificate of Honour belongs may, if desired, dispense with any Terms, not exceeding 2, that may remain to be kept by him.

*Calls to the Bar.* Minimum age, 21. In special circumstances the Masters of the Bench may dispense with the keeping of not more than 2 of the 12 terms ordinarily required to be kept by a student before he is called. For war service an even more liberal dispensation may be granted, and students having certain qualifications may be excused examinations. Special concessions in regard to the keeping of terms or examinations, etc., are allowed to Scottish Advocates, Irish Barristers, members of the Bar of New South Wales, Ceylon, the Cape Province of South Africa, New Zealand, Vakils of High Courts in India, and to persons who, prior to admission as students, have practised as Solicitors for 5 yrs. (including interruptions caused by war service).

*Fees.* On admission: application, 1 g.; stamp duty, £25; lecture fee, 12 gs.; admission fees, £20 or £21. On Call: stamp duty, £50; composition for annual dues, £12; call fees, £38 (Gray's), £40 (Lincoln's), £50 (Middle or Inner).

## SOLICITORS IN ENGLAND AND WALES

Examinations are held by the LAW SOCIETY, Chancery Lane, London, W.C.2. All persons, except some Colonial Solicitors, are subject to Final examination at conclusion of service under Articles before they can be admitted as Solicitors. Subjects of Foreign States cannot be admitted. English Barristers of 5 yrs.' standing are not required to enter into Articles, but may be admitted after passing the Final examn. Before entering into Articles of Clerkship (under the Solrs. Act, 1877) with a view to admission as Solicitors it is necessary, except for persons exempted, to pass a *Preliminary examn.* (fee, £4) held in London and several provincial towns in Feb., July, and Oct., in English, Elem. Maths., Geog. of Europe, and Hist. of England, Latin, and one or (if Algebra and Elem. Geom. are not taken) two of the following—Latin translation, Greek, French, German, Spanish, Italian. Exemption is allowed to graduates in Arts or Laws of any Univ. of the

U.K., except Birm. and Brist.; to Utter Barristers in England; and to persons who have passed the examns. numbered in list on p. 550 as 1a, 2, 3, 4a, 8 (a), 9, 9a, 10, 10a, 16 (First-Class certif.); also *provided* the candidate passed in Latin, and all the prescribed subjects were taken at one time, and the regns., character, and standard of the examn. remains as in July 1920, the following: 1, 1b, 5, 6, 7 (Certif. A.), 8 (b), 13, 14, 24. The list of exemptions is now (Jan. 1923) being revised.

*Service under Articles* (stamp duty, £80) is normally for 5 yrs. This may be reduced: (1) to 3 yrs. for graduates in Arts or Laws of any Univ. of the U.K., except Birm., Belf., or N.U.I., or for members of the Faculty of Advocates, Writers to the Signet and Solrs. in the Supreme Courts of Scotland, or Procurators before any of the Sheriff Courts of Scotland; (2) to 4 yrs. for persons who have (a) passed examns. Nos. (v. list on p. 550) 1, 1a, 1b, 2, 3 (1st Division), 4a, 6 (1st Division), 13 (with Hons.), 24, if the conditions of the last-mentioned proviso were fulfilled, or (b) before entering into Articles attended for 1 yr. the approved curriculum of study at the Law Society and passed a satisfactory examn. therein, or (c) before entering into Articles passed examn. No. 6 (Latin being taken), and subsequently attended, to the satisfaction of the Univ., the curriculum for the Interim LL.B. of Leeds, Liverpool, or Sheffield, and passed Interim LL.B. examn.

An *Intermediate* examn. (fee, £6), which may be taken after completing 12 months' service, is held in March, June, and Nov. Exemption from the Legal portion (but not from the Trust Accounts and Book-keeping portion) is given to those who (i.) before or after entering into Articles have passed the examn. for the B.C.L. or LL.B. at any of the Univs. of England (except Bristol) and Wales or at the Univ. of Dublin; or (ii.) before entering into Articles have taken Honours in the Final Honour School of Jurispr. at Oxford or in the Law Tripos at Cambridge. Exemption from the whole of this examn. in consideration of circumstances connected with the war is obtainable under certain conditions (v. sec. 2 of Solrs. Act, 1918).

The *Final* examn. (fee, 10 gs.) is held in March, June, and Nov. Prints of the Questions set at this and at the Interim. are obtainable from the Law Society.

## XI

MEDICAL AND DENTAL QUALIFICATIONS  
AND STUDIES

## A. MEDICAL QUALIFICATIONS

*Address of the Registrar, General Medical Council*—44 Hallam St., Portland Place, London, W.1. *Telegrams*—Genmedicum, Eusroad, London. *Addresses of Registrars of Branch Councils*—20 Queen St., Edinburgh; 35 Dawson St., Dublin.

No person is recognized by law as a duly qualified Medical Practitioner in Great Britain or Ireland whose qualification is not *registered* in the books of the *General Medical Council*. The following lists show the registrable qualifications obtainable (a) in Great Britain and Ireland, (b) in British Possessions overseas, (c) in foreign countries. The document presented in evidence of any of these must show that the possessor has passed a Qualifying examn. in Medicine, Surgery, and Midwifery. For registration in the Colonial or Foreign list it is essential that the qualification be first registered in the Province, State, etc., in which it was obtained.

## (a)

Royal College of Physicians, London—F., M., L., R.C.P. Lond.  
 Royal College of Surgeons of England—F., M., R.C.S. Engl.  
 Royal College of Physicians of Edinburgh—F., M., L., R.C.P. Edin.  
 Royal College of Surgeons of Edinburgh—F., L., R.C.S. Edin.  
 Royal Faculty of Physicians and Surgeons of Glasgow—F., L., R.F.P.S. Glas.  
 Royal College of Physicians of Ireland—F., M., L., L.M., R.C.P. Irel.  
 Royal College of Surgeons in Ireland—F., L., L.M., R.C.S. Irel.  
 Apothecaries' Soc. of London—L.M.S.S.A. Lond.  
 Apothecaries' Hall, Dublin—L.A.H. Dub.  
 Each Univ. in the U.K.—M.D. (Ox., D.M.), M.B. (Ox., B.M.), Ch.B. (or B.Ch. or B.S.), Ch.M. (or M.Ch. or M.S. or C.M.) ; Dub. : L.Med., L.S.  
 Registrable Diplomas or Certificates for proficiency in Sanitary Science, Public Health, or State Medicine which may be added to qualifications already registered but do not admit primarily to the Register : D.P.H. (R.C.P.S. Engl., R.C.P.S. Edin., and R.F.P.S. Glas., R.C.P.S. Irel., and each of the Univs. of Great Britain and Ireland, except London).  
 B.Hy., D.Hy. Durh.  
 M.D. (S.M.) Lond.  
 M.H. L'pool.  
 B.Sc. (P.H.), D.Sc. (P.H.) Edin.; B.Sc. (P.H.), D.Sc. (P.H.) Glas.  
 Under the Public Health Acts no appointment as Med. Officer of

Health may be made in any county, district, or combination of districts of a population of 50,000 or upwards unless he is registered as the holder of a Diploma in San. Sc.

New Rules for obtaining qualifications in Public Health were adopted on May 22, 1922, and will come into operation on Jan. 1, 1924. They revise the curriculum and extend the period between the obtaining of an original qualification and a Diploma to not less than 2 years.

(b)

*Australia.* M.B., M.D. Syd., Adel., or Melb.; Ch.M. Syd.; B.S., M.S. Adel.; B.S. Melb.

*Canada.* M.D. Dal., Laval, McG., Mani., Mont.; C.M. Dal., McG.

L.M.S. New Brunswick Provincial Council of P. & S., or Nova

Scotia Provl. Med. Board, or Prince Edward Island Med. Council.

M.C.P. & S. Alta., or Mani., or Ont., or Sask.

As qualifications which may be added (1) to M.C.P. & S. Ont.—M.B.,

M.D., C.M. of Queen's, M.B., M.D. Tor., or M.D. Western; (2)

to M.C.P. & S. Mani.—M.D., C.M. Mani.

*Ceylon.* L.M.S. Ceylon Med. Coll.

*Hong-Kong.* M.B., B.S. Hong-Kong.

*India.* M.B., B.S. All.

L.M.S., M.B., B.S., M.D., M.S. Bom.

L.M.S., M.B., M.D., M.S., M.O. Calc.

M.B., B.S., M.D., M.S. Mad.

L.M.S., M.B., M.D., M.S. Panj.

M.B., B.S. Lucknow.

*Malta.* M.D. Malta.

*Newfoundland.* L.M.S. N.F. Med. Board.

*New Zealand.* M.B., Ch.B., M.D. N.Z.

*South Africa.*

M.B., Ch.B. Cape Town.

M.B., Ch.B. S. Africa.

M.B., B.Ch. U. Witwatersrand.

*Straits Settlements.* L.M.S. Singapore Med. Coll.

(c)

Degrees of (i.) Doctor of Med. and Surg. of all the Royal Italian Univs.; (ii.) Bachelor of Med. and Doctor of Med. of the Imperial Univs. of Japan; and Bachelor of Med. of any Govt. or Prefectural Special Med. Coll. or of a private special Med. Coll. designated by a Minister of Educn. of the Empire of Japan.

## B. REGISTRATION OF MEDICAL STUDENTS

The Regulations (including the modifications which came into force on Jan. 1, 1923), obtainable from the Registrar, 44 Hallam St., London, W.1., post free 1s., prescribe Registration of Medical Students within 15 days of the commencement of their professional studies. For this purpose they should apply in the prescribed form, obtainable

from any of the Registrars (v. *supra*), submitting evidence of having—(a) attained the age of 17; (b) passed a Preliminary examn. in General Education recognized by the Council; (c) passed also an examn. in *Elementary Physics* and *Elementary Chemistry* conducted or recognized by one of the Licensing Bodies; (d) commenced Medical study at an approved Univ. or Medical School.

As regards (b) the Council recognizes no examn. which is of standard lower than that of Univ. Matricn. examns. in the faculties of Arts and Pure Science, and requires that the examn. certificate shall bear evidence that the candidate has passed in English, Elem. Maths., a language other than English, and an additional subject or subjects as required by the regulations of the particular examn., to be chosen from the subjoined list, viz. Hist., Geog., Physical Sc., Nat. Sc., Latin, Greek, Hebrew, French, German, or other language accepted by the Univ. for the purpose. Applicants from one of the recognized Colonial Univs. must produce evidence that they have passed the complete Matricn. examn. for the faculty of Arts or of Science (Pure) of the Univ. or College from which they come, or an examn. accepted as equivalent thereto, and that the examn. passed is accepted by one of the Univs. of Great Britain or Ireland for similar purposes. Applicants from one of the recognized Indian Univs. must produce evidence that they have passed the Matricn. examn. of the Univ. from which they come, or an examn. recognized as equivalent thereto, and, in addition, the Preliminary Scientific or Intermediate examn. in Arts or Science of their own Univ. Applicants from Foreign Univs. should submit their credentials to the Registrar.

As regards (c), this requirement is not dispensed with in cases where *Physics* and *Chemistry* of a Matricn. standard formed part of the (b) examn., but in the case of an applicant from one of the recognized Colonial Univs. or Colleges, the Council will accept a certificate that an examn. in Physics and Chem. (and, in addition, *Biology*, v. *infra*) equivalent in standard to the First Professional examn. in these subjects has been passed by the student. Similarly, in the case of an applicant from one of the recognized Indian Univs. the Preliminary Scientific or Intermediate examn. in Arts or Science of his own Univ. will suffice if these subjects are included in his Pass certificate.

As regards (d), institutions in which Medical Study may be commenced include all the Univs. and other Bodies throughout the Empire of which the *qualifications* (v. *supra*) have been recognized as entitling to registration in the U.K.

A student who has diligently attended an approved course of instruction in *Elementary Biology* at a Secondary school or other teaching institution recognized by a Licensing Body may be admitted to the Professional examn. in this subject immediately after his registration as a student.

### C. DENTAL QUALIFICATIONS

Under the Dentists Act 1921 no person who is unregistered may practise dentistry without rendering himself liable to prosecution.



A new body named the Dental Board of the United Kingdom has been constituted which is charged with the duty of dental registration. The address of the Registrar is 44 Hallam St., London, W.1.

The following lists show the registrable qualifications obtainable (a) in Great Britain and Ireland, (b) in British Possessions overseas, (c) in foreign countries.

(a)

Royal College of Surgeons of England—L.D.S., R.C.S. Eng.  
 Royal College of Surgeons of Edinburgh—H.D.D., L.D.S., R.C.S. Edin.  
 Royal Faculty of Physicians and Surgeons of Glasgow—H.D.D., L.D.S., R.F.P.S. Glas.  
 Royal College of Surgeons in Ireland—L.D.S., R.C.S. Irel.  
 Univ. of Birmingham—M.D.S., B.D.S., L.D.S. U. Birm.  
 Univ. of Bristol—B.D.S., L.D.S. U. Brist.  
 Univ. of Durham—L.D.S. U. Durh.  
 Univ. of Leeds—M.D.S., B.D.S., L.D.S. U. Leeds.  
 Univ. of Liverpool—M.D.S., B.D.S., L.D.S. U. L'pool.  
 Univ. of London—M.S. (Dent.) U. Lond.  
 Victoria University of Manchester—M.D.S., B.D.S., L.D.S. U. Manc.  
 Univ. of St. Andrews—L.D.S. U. St. And.  
 Univ. of Dublin—M.D.Sc., B.D.Sc., L.D.Sc., U. Dubl.  
 National Univ. of Ireland—M.D.S., B.D.S. N.U. Irel.

(b)

Victoria, Australia—L.D.S. Vict.  
 Univ. of New Zealand—B.D.S. U. N. Zealand.  
 Univ. of Sydney—B.D.S. U. Sydney.  
 Univ. of Melbourne—D.D.Sc., B.D.Sc. U. Melb.

(c)

Diploma in Dentistry granted to Candidates in Medicine of the Univs. of Brussels, Ghent, Liège and Louvain, after examn. by a Belgian Provincial Medical Commission—Dent. Dip. Belg.

Diploma of Doctor of Dental Surgery (Shikwa'-Igakushi) of the Nippon Dental College—D.D.S. Nippon Dent. Coll.

Diploma of Doctor of Dental Surgery (Shikwa'-Igakushi) of the Tokyo Dental College—D.S.S. Tokyo Dent. Coll.

## D. REGISTRATION OF DENTAL STUDENTS

I. Registration is carried on at the Council Office in London in the same manner as that of Med. students, and is subject to the same regns. as regards age and Prelim. examns., but professional study may commence by pupilage with a Registered Dental Practitioner.

II. Candidates for a Diploma in Dental Surgery should produce

certificates of having been engaged in professional studies for at least 4 years, including 3 years at least at a school or schools recognized for professional study by one of the Licensing Bodies, and of having received for not less than 24 calendar months, or for 2000 hours, practical instruction in Dental Mechanics.

III. Two years' *bona-fide* apprenticeship with a Registered Dental Practitioner, after being registered as a Dental student, may be counted as 1 of the 4 yrs. of professional study.

IV. The necessary instruction in Mechanical Dentistry, or any part of it, may be taken by the Dental student either before or after his registration as a student. When he can show evidence of regular pupillage in Mech. Dentistry to a Registered Practitioner, prior to passing the prescribed Preliminary and Scientific examns., he may be allowed to antedate for a period not exceeding 1 yr. prior to the passing of these examns.

V. It is recommended that instruction in Dental Mechanics be taken at a recognised Dental Hospital and School. If any part of such instruction be taken by the candidate as a pupil with a Registered Dental Practitioner, the time required to be devoted to it will be at least twice the time required for the corresponding instruction taken at a Dental School.

*Schools at which Dental Study may be commenced:* Birmingham D. Hospl; Bristol, Royal Infirmary, Genl. Hospl.; Dublin, D. Hospl. of Ireland; Dundee D. Hospl.; Edinburgh D. Hospl.; Glasgow D. Hospl.; Leeds, D. Hospl., Public Dispensary; Liverpool D. Hospl.; London, Guy's Hospl. D. School, London Hospl. D. School, Univ. Coll. Hospl. D. School, Royal D. Hospl.; Manchester D. Hospl.; Newcastle-upon-Tyne D. Hospl.; Sheffield Royal Hospl.; Roy. Coll. of Surg. in Ireland; D. Department of any Univ. of the U.K.

## E. RECIPROCAL RECOGNITION

The States, Presidencies, and Provinces in which the registrable medical qualifications specified under A (b), (c), are granted all allow practitioners with qualifications registered in the U.K. to register without further examn. There are also other Colonies, *e.g.* Tasmania, which recognize British qualifications, but in which at present no qualifications are granted.

[A Report (5th edition pubd. in Jan.. 1921) as to the conditions under which Med. and Dent. practitioners registered or legally qualified in their own country may practise abroad is obtainable from the Council Office, price 2s. 6d. (post free U.K. 2s. 10d., elsewhere in the Empire 3s. 1d., outside 3s. 4d.). It contains, among other matters, the designations and addresses of the persons to whom application should be made for forms and further information.]

## F. POST-GRADUATE MEDICAL STUDIES

In London, in addition to the General Hospital Medical Schools which provide to a limited extent for qualified practitioners, there are

the West London Post-graduate College at the West London Hospital, Hammersmith, with a staff of 37 regular lectrs. and demrs., the North-East London Post-Graduate College at the Prince of Wales' Hospital, Tottenham, and the London School of Clinical Medicine at the Seamen's Hospital, Greenwich, as well as certain special hospitals where excellent arrangements are made for post-graduate work in particular subjects. The Fellowship of Medicine (1 Wimpole St., London, W.1) formed in 1918, promotes and advertises the provision of facilities for post-graduate work and provides machinery by which graduates can make use of the courses likely to be of service to them.

Post-graduate courses are also provided by other Univs., notably Edinburgh and Glasgow.

A committee was appointed in Jan. 1921 by the Minister of Health, with the Earl of Athlone as chairman, to investigate the needs of medical practitioners and other graduates for further education in medicine in London, and to submit proposals for a practicable scheme for meeting them. This Committee reported in May 1921 in favour of the Constitution of a Central Post-graduate Hospital.

## ROYAL COLLEGE OF PHYSICIANS OF LONDON AND ROYAL COLLEGE OF SURGEONS OF ENGLAND

*Address of the Secy., Conjoint Examining Board in England, 8-11 Queen Sq., Bloomsbury, London, W.C.1. Applications for admission to the Board's examns. should reach the Secy. at least 14 days (in the case of the L.D.S. Professional examns., 21 days) beforehand. Agency for the sale of Books of Questions set in past years (9d. each)—Taylor & Francis, Red Lion Court, Fleet St., London, E.C.4.*

[*N.B.*—The Regulations of the Conjoint Examining Board and for the Licence in Dental Surgery which are described below are *applicable only to students who have passed* the required Prelim. examn. in general education *before Jan. 1, 1923*. For others Revised Regulations have been published.]

Examinations for the Diplomas of LICENCE OF THE R.C.P. of London and MEMBER OF THE R.C.S. of England are held ordinarily in Jan., April, July, and Sept. or Oct. Candidates must have passed a Prelim. examn. in general education recognized by the Board, and must, before admission to the examns., produce certificates of having pursued the prescribed courses of study and practice. The *First Professional examn.* (fee, 10 gs.) comprises: Pt. I., Chem.; Pt. II., Physics; and Pt. III., Elem. Biol. Candidates may take this examn. immediately after passing the Prelim., provided they have the prescribed certificates of instruction and laboratory work in institutions recognized by the Board, in Chem. (180 hours), Physics (120), and Biol. (120). Pt. III. may be taken separately if desired. The *Second Prof. examn.* (fee, 10 gs.): Pt. I., Anat. and Physiol. (studied after the candidate has passed

in 2 of the subjects of the First examn.), and Pt. II., Mat. Med. and Pharmacology. The Parts may be taken separately. The *Final* (fee, 20 gs.): Pt. I., Med., including Med. Anat., Path., Therap., Forensic M., Pub. Health; Pt. II., Surg., including Path., Surg. Anat., use of Surg. appliances; Pt. III., Midw. and Dis. of Women. 2 yrs. must have elapsed since passing the Second examn. The parts may be taken separately.

*Exemptions.* (a) Candidates who shall have passed an examn. for a degree in Medicine in any of the subjects of the First examn. conducted at a Univ. in the U.K., in India, or in a British Colony, will be exempt from examn. in the subjects in which they have passed. (b) Candidates with colonial, Indian, or foreign qualifns. which entitle them to practise Medicine or Surgery in the country where such qualifns. have been conferred, after a course of study and examn. equivalent to those required by the regns. of the two Colls., will, if at least 21 yrs. of age and proficient in Vaccination, be admissible to the Second and Final examns. without any intervals between them. (c) Members of English Univs. who shall have passed an examn. or examns. at their Univ. comprising the subjects of the First and Second examns. of the Board, and completed the curriculum of medical study required by the Board, will, 2 yrs. after having passed in Anat. and Physiol., be eligible for admission to the Final examn. of the Board on payment of 5 gs.; and after passing the Final examn. on the further payment of not less than 35 gs., and subject to the By-laws of each Coll., to receive the Diplomas. (d) Members of a Scotch or Irish Univ. may obtain a similar concession. (e) Any member of a colonial, Indian, or foreign Univ. recognized for the purpose may obtain a concession similar to (c), but has to pay 20 gs. before admission to the Final examn. and not less than 20 gs. before receiving the Diplomas. The following colonial, Indian, and foreign Univs. have been recognized for this purpose: in Canada—Dal., Laval, McG., Manlt., Queen's, Tor., Westn.; Australasia—Adel., Melb., Syd., N.Z.; India—All., Bom., Calc., Mad., Panj.; South Africa—Cape Town, Witwatersrand; Malta, Hong-Kong; Paris, Lyons, Mars., Montp., Nantes, Toulouse, Strasbourg, Bordeaux, Lille, Rennes, Alger; Brussels, Liège, Louvain; Amsterdam, Groningen, Leyden, Utrecht; Bern, Basle, Geneva, Lausanne, Zurich; Rome, Bologna, Florence, Genoa, Milan, Naples, Pavia, Pisa, Turin; Petrograd, Kharkov, Moscow, Warsaw; Christiania, Stockholm, Upsala, Copenhagen; Madrid, Salamanca, Seville, Lisbon, Coimbra, Oporto, Tokyo Impl. Univ. 42 Univs. in the U.S.A.

For admission to the MEMBERSHIP OF THE R.C.P. (fee, 40 gs., *less* Licence fee, if any, already paid) the minimum age is 25, and a candidate must satisfy the Censors' Board as to his moral character and conduct and pass an examn. of such nature and extent as may be determined by the Board. If under the age of 40, he must prove a knowledge of Latin, and of either Greek, French, or German, in addition to proving his professional acquirements. If he has not passed the examns. required for the Licence, he must be a registered practitioner who *either* has obtained the degree of Doctor or Bachelor of Medicine at a Univ. in the Empire or a foreign qualification entitling him to practise

Medicine or Surgery in the country where it was conferred, after undergoing courses and examns. which the Censors' Board consider sufficient, or has attained the age of 40, and can produce testimonials sufficient to satisfy the Board, and subsequently the Fellows, at a General Meeting, that he ought to be admitted to examn.

The FELLOWSHIP of the R.C.P. is conferred by election on a member of the College of not less than 4 yrs.' standing:

Examns. for the FELLOWSHIP of the R.C.S. are held twice yearly—the 1st Prof. in June and Dec., and the 2nd Prof. in May and Nov. Fees, first examn., 8 gs., 2nd, 12 gs., admission to Fellowship (minimum age, 25), 30 gs., or, for M.R.C.S. Eng., 20 gs., *less* examn. fees not exceeding 20 gs. The *First* examn. (in Anat. and Physiol.) is open to M.R.C.S. Eng., and, on production of certain certificates involving work extending over 3 winter sessions, to (a) candidates who have passed the First Examn., Pts. I., II. and III., and the Second examn. for the L.R.C.P. Lond. and M.R.C.S. Eng., and (b) members of Univs. recognized under the Regns. of the Board. The *Second* examn. (in Surgery, including Surg., Anat., and Path.) is open, provided they have passed the First, to (a) M.R.C.S. Eng. who have been engaged not less than 6 yrs. in the study or study and practice of the profession, and (b) persons possessing the registrable Surg. and Med. degrees of the under-mentioned Univs., who have been engaged after obtaining such degrees in the study, or study and practice of the profession for 4 yrs., including 1 yr. spent in attendance upon the Surg. Practice of a recognized Hospl. or Infirmary: the Univs. of the U.K., Dalhousie, Laval, McGill, Manitoba, Queen's (Kingston), Toronto, Western (Ont.), Adelaide, Melbourne, Sydney, N.Z., Bombay, Calcutta, Madras, Panjab, Hong-Kong, Italian Royal Univs. and Imperial Univ. of Japan.

Examns. for the LICENCE IN DENTAL SURGERY (L.D.S., R.C.S. Eng.) are held, the Prelim. Science (identical with Pts. I. and II. of the Conjoint Board's First examn.) in Jan., March or April, July, and Sept., the First Professional in Jan., April, and Sept., and the Second Professional in Feb., May or June, and Nov.

Candidates must have been registered as Med. or Dental students by the Gen. Med. Council, or have passed one of the examns. in general education recognized by the Board, or in the case of a D.M.D. Harvard, or D.D.S. Penn., Mich., Illinois, or St. Louis, Missouri, completed a 4 yrs.' High School course at a reputable High School. Candidates for the Prelim. Science examn. (fee, 5 gs.) must have received instruction in Chem. (180 hours) and Physics (120 hours) in an institution recognized for the purpose. One who has passed in either for a degree in Med. at a Univ. recognized by the Board is exempt from further examn. therein. A holder of the Licence of the Dental Board of Victoria, Australia, or D.M.D. Harvard, or D.D.S. Penn., Mich., Illinois, or St. Louis, Missouri, is exempt from this examn.

The *First Professional examn.* (Pt. I., Mech. Dent., fee, 4 gs.; II., Dent. Metall., fee, 1 g.; III. (a) Anat. and Physiol., (b) Dent. Anat. and Physiol., fee, 4 gs.) is taken after 2 yrs.' instruction in Dentistry in accordance with prescribed conditions. Those who have passed the second examn. of the Conjoint Board or the examn. in Anat. and

Physiol. for a qualification registrable under the Med. Act of 1886, or for the M.D. of a foreign or Colonial Univ. recognized by the Board, are exempt from further examn. in those subjects in Pt. III.

For the *Second Professional Examn.* (minimum age, 21 ; fee, Part I. 2 gs., II. 4 gs.) prescribed study courses must have been completed, and, except in the case of a Colonial or Foreign Dentist, 6 mos. must elapse after passing the First before sitting for the Second Professional examn., and the candidate must before taking Pt. II. have been engaged in professional study during 4 yrs. after passing the required Prelim. examn. in general educn. Those who are M.R.C.S. Eng., or have passed the examn. in Surgery of the Conjoint Board, or for a qualification registrable under the Med. Act., 1886, are exempt from Part I. of the examn.

For the DIPLOMA IN PUBLIC HEALTH,\* Part I. of the examn. is held in April, June, and Dec., and Part II. in Jan., April, and July. Both Parts must be passed ; they may be taken together or separately. In the latter case Part I. must be passed before admission is allowed to Part II. Fee for each Part, 10 gs. (candidates who hold Diplomas of R. Colls., 6 gs.). Qualifications for admission to Part I. : a registrable qualifn. in Med., Surg., and Midw. held for at least 12 mos., and practical instruction during at least 240 hours for 6 mos. (subsequent to obtaining such qualifn.) in a laboratory recognized by the Examining Board, in Chem., Bact., and the Path. of Diseases of Animals transmissible to man ; for admission to Part II. : (a) 9 mos.' special study of Pub. Health since obtaining a registrable qualifn. ; (b) 6 mos.' (at least 60 working days) practical training in Pub. Health administration under a Med. Officer of Health of sufficient standing in the British Empire or under a Sanitary Staff Officer of the R.A.M.C. in charge of a unit recognized for this purpose by the General Medical Council ; and (c) attendance twice weekly during 3 mos. after obtaining a registrable qualifn. on the practice of a Hospl. for Infectious Diseases, including instruction in Methods of Administration. Candidates who have held for 3 yrs. appointments as Med. Officers of Health of Sanitary Districts within the British Dominions having a population of not less than 15,000 may be exempt from condition (b), and the prescribed period, 6 mos. (and 60 working days), may be halved in consideration of having during 3 mos. attended after obtaining a registrable qualifn. a course of instruction in Sanit. Law, Vital Stats., Epidemiology, School Hygiene, etc., given by a teacher in the Dept. of Pub. Health of a recognized Med. School, or been resident Med. Officer in a Hospl. for Infec. Diseases of at least 100 beds.

The examn. for the DIPLOMA IN THE DISEASES AND HYGIENE OF THE TROPICS is held in April, July, and Dec. Fee, 9 gs. Qualifications for admission : instruction and clinical practice, as prescribed, during 3 mos. after obtaining a registrable qualifn. in Med., Surg., and Midw. Graduates in Med. or Surg. of Indian, Colonial, and Foreign Univs. recognized by the Board, whose degrees are not registrable in the U.K. may also under certain conditions be admitted. The prescribed conditions of study may be modified in view of Foreign or Colonial Med.

\* N.B.—See note on p. 521 regarding new rules.

service, or public professional or teaching work, or original investigation in tropical countries.

The examn. for the DIPLOMA IN OPHTHALMIC MEDICINE AND SURGERY (D.O.M.S., R.C.P. and S. Eng.) is held in Jan. and July; that for the DIPLOMA IN PSYCHOLOGICAL MEDICINE (D.P.M., R.C.P. and S. Eng.) in June and Dec. The fee for admission (or re-admission) to each of the two parts of either examn. is 6 gs. Graduates in Med. or Surg. of Indian, Colonial, and Foreign Univs., recognized by the Examining Board in England, may enter, whether their degrees are registrable in this country or not, on fulfilling the prescribed conditions in regard to study.

All the above examns. are open to WOMEN, who are also eligible, subject to the provisions of the Medical Act, 1876, and Bye-laws of the Colleges, for the Diplomas of L.R.C.P., M.R.C.S., and F.R.C.S.

# ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH, ROYAL COLLEGE OF SURGEONS OF EDINBURGH, AND ROYAL FACULTY OF PHYSICIANS AND SUR- GEONS OF GLASGOW

\* Joint examinations, open alike to men and women, are held in Edinburgh (in 1923—March-April), and in Glasgow (in 1923—Jan. and July) for the DIPLOMAS IN MEDICINE, SURGERY, AND MIDWIFERY of these three bodies. Applications for admission should reach the Inspector—in Edinburgh, D. L. Eadie, 49 Lauriston Place; in Glasgow, W. Hurst, 242 St. Vincent St.—at least one week before. Fees: for First examn. (in Physics, Chem., and Elem. Biol.), £5, or for each subject, £2 : 10s.; Second (Anat. and Physiol.), £5, or for each subject, £3; Third (Path. and Mat. Med. with Pharmacy), £5, or for each subject, £3; Final (Med., Surg., Midw., and Med. Jurispr., and Pub. Health), £15 for the whole, and £5 for M. J. and P. H. if taken separately. Exemptions: (1) from examn. in any subject of the first 3 examns. on production of certificate (in which subject is specified) of having passed an equivalent examn. for a Med. qualification before certain Boards recognized by the 3 co-operating bodies; (2) from first 3 examns. in case of candidate possessing a recognized Colonial, Indian, or Foreign qualification entitling him to practise Med. and Surg. in the country where it was granted, provided he has passed a Prelim. examn., and attended a course of study as required by the Regns., and proved that he has passed for such qualifn. a separate examn. in each of the subjects of the first 3 examns. of the Joint Board. The Boards whose earlier Med. examns. are wholly or partly recognized are: the R.C.P. and R.C.S. in the U.K., the R.F.P.S. Glas., Conjoint Boards in England and Ireland, Univs. of U.K.; S.A. Lond. and A.H. Dub. under provisions of Med. Act, 1886; Univs. in India and Univs. and Colls. in Brit.

\* Regulations applicable to candidates who have registered as Medical students prior to Jan. 1, 1923.

Dominions whose Matricn. examns. have been recognized by the Gen. Med. Council, whose curriculum fulfils the requirements of the Conjoint Board, and whose Diplomas are granted upon equivalent examns. ; such foreign Universities as grant Med. and Surg. qualifications entitling to practise in the country in which granted as may be recognized as entitling to registration under the Med. Act, 1886, after a course equivalent to that required by the Conjoint Board, and preceded by an examn. in Arts recognized by the Gen. Med. Council.

*Medical Qualification obtained in the U.S.A.* The Scottish Conjoint Board resolved on 30th June 1920 to admit to its Final examn. any candidate who produces evidence of having passed the qualifying examn. of the National Board of Examiners of the U.S.A.

Examns. for the DIPLOMA IN PUBLIC HEALTH (fee, 12 gs., or for each Part, 6 gs.) are held early in Oct. in Edinburgh and early in May in Glasgow, the conditions being similar to those for admission to the corresponding examns. in England, v. p. 518.

The R.C.P. Edin. may admit to examn. for its single qualification—LICENCE—any candidate who has a Surg. qualification recognized for the purpose. Fee, 15 gs. Examns. held every month, except Sept. and Oct. Admission to MEMBERSHIP (minimum age, 24) is by election. Candidates must hold a Licence of a British or Irish College of Physicians or Degree in Med. of a Univ. approved by the Council, and pass the prescribed examn. unless exempted by the Council from the whole or part of it in consideration of work in any sphere of Med. adjudged to be of high distinction. Fee, 35 gs., or, if a L.R.C.P. Edin., 20 gs. A member of 3 yrs.' standing may be elected FELLOW. Fee, 38 gs., and stamp duty, 25 gs. The College has a Library of 100,000 vols. and Research Laboratory.

For admission to the FELLOWSHIP OF THE R.C.S. Edin. candidates must pass an examn. (fee, £45, or for L.R.C.S. Edin., £35) in : (a) Principles and Practice of Surgery, including Surg. Anat. ; (b) Clinical S. ; (c) one of the following—including clinical or practical as well as written and oral tests—S. Path. and Operative S. ; Ophth. S. ; Aural, Nasal, and Laryng. S. ; Obst. S. ; Gyn. ; Adv. Anat. ; Dental S. Qualifications for admission to the examn. (which is now open to women) : minimum age, 25 yrs. ; 2 yrs.' study and practice of the profession after obtaining one of the following, or other approved qualifications in S. : those of R.C.S. Eng., R.C.S.I., R.F.P.S. Glas. ; Surgical degrees of the Univs. of the U.K. and Canada, Adelaide, Melb., Syd., N.Z., Bom., Calc., Mad., Panj. ; L.M.S.S.A. Lond., and L.A.H. Dub. registered under the Med. Act, 1886.

At the final consideration of the candidate's petition for admission to the Fellowship election is determined by ballot.

\* Examns. for the LICENCE IN DENTAL SURGERY, R.C.S. Edin., are held at the end of Oct., middle of March, and beginning of July. One week's notice required. Open to men and women. The *First* examn. comprises : (a) Chem. and Physics, (b) Anat. and Physiol. Fee, 5 gs., or for (a) or (b) separately, 3 gs. The *Second* (fee, 10 gs., or if exempted

\* Applicable to candidates who have registered as Dental Students prior to Jan. 1, 1923.



from First, 15 gs.) cannot be taken before conclusion of prescribed courses. It comprises: Surg. and Med.; Dental Anat. and Physiol., D. Surg. and Path., D. Mat. Med., D. Mech., and D. Metall., with practical, written, and oral examn. in Dental and Oral Surg., Path., and Mech.

Minimum age, 21. A candidate must have been registered as a Dental Student by the Gen. Med. Council; pass the usual Prelim. examn. of General Educn.; have been engaged in professional study for at least 4 yrs.; have attended for specified periods courses in the general subjects of a recognized Med. School, and for 3 mos. special courses at a recognized D. Hospl. and School, and for 2 yrs. the Practice (Surg. and Mech.) of a recognized D. Hospl. or D. Dept. of a General Hospl.; have received for 3 yrs. (if previously registered Med. Practitioner, 2 yrs.) practical instruction in Mech. D. from a registered Dentist or in the Mech. Dept. of a recognized D. Hospl. and School as apprentice or otherwise, either before or after registration.

Grounds for *exemption* (1) from First examn.: having passed the qualifying examns. in (a) and (b) for registrable Med. qualifications; (*pro tanto*) having passed in any of subjects (a) and (b) before any Dental Licensing Board recognized by the College its Final (or only) examn. in the subject, if co-extensive in scope and pre-requisite educn. with that of the College; (2) from proof of attendance on other than special Dental courses of lectures and instruction and from examn. in other departments than these: Registered Med. Practitioners. The Dental curricula of Indian, Colonial, and Foreign Boards may be recognized in part by the College.

An examn. for a HIGHER DENTAL DIPLOMA, open to Registered Dentists of at least one year's standing, holding qualifications recognized for the purpose by the College is held half-yearly (1923—May and Nov.). Fee, 15 or 20 gs.

Examns. for the LICENCE OF THE R.F.P.S. Glasgow can be arranged at any time of the year, except August. Fee, 15 gs. Qualifications for admission: Licence of one of the Colleges of Physicians of the U.K. or Colonies, or of the Soc. of Apothecaries of London or Apothecaries' Hall, Dublin, conferred after passing the qualifying examns. of these bodies; Degree in Med. of a Univ. of the British Empire.

Examns. for the FELLOWSHIP of the R.F.P.S. Glasgow are held in Jan., April, July, and Oct. 14 days' notice required. Admission to the Fellowship (fee, £30, or for L.R.F.P.S., £25; additional, qualifying to hold office, £20, or for L.R.F.P.S., £15) is either by examn. and subsequent election by ballot or by election in virtue of high distinction in Med. Science or Practice of persons not less than 40 yrs. of age who have been qualified for at least 10 yrs. Not more than 4 Practitioners are admitted by the latter method annually. Candidates must be proposed by 2 Fellows of the Faculty. Special regns. for candidates who have served in the Great War.

Examns. for the LICENCE IN DENTAL SURGERY OF THE F.P.S. Glasgow are held early in April, July, and Oct. One week's notice required. Candidates must have been registered at the beginning of studentship,

as Dental student, by the Gen. Med. Council, and produce certificates of 4 yrs. of professional study subsequent to registration and in accordance with prescribed conditions. Those already qualified under the Medical Acts need not produce evidence of attendance on courses in subjects not special to Dentistry, and will not be examined in such subjects. The *First Dental examn.* is in 3 divisions: (A) Chem. and Physics; (B) Dent. Metall. and Dent. Mech.; (C) Human Anat. and Physiol. Fee, 6 gs., or for each division, 2 gs. The *Final Dental examn.* is in (a) Principles of Surgery; Med., with Mat. Med. and Therap., mainly in their application to D. Surg.; (b) D. Anat. and Physiol., D. Path., Bact., and Surg.; (c) D. Surg. (Practical) in a D. Hospl. Fee, 9 gs. Examns. are held, under conditions similar to those prescribed by the R.C.S. Edin. (v. p. 531), for a HIGHER DENTAL DIPLOMA.

All examns. of the R.F.P.S. are open to women as well as to men.

## ROYAL COLLEGE OF PHYSICIANS AND ROYAL COLLEGE OF SURGEONS IN IRELAND

*Address of Committee of Management of the Conjoint Board*—Royal College of Surgeons, Stephen's Green, Dublin. Registrar of the R.C.P.—6 Kildare St., Dublin.

Professional examns. for the LICENCES IN MEDICINE, SURGERY, AND MIDWIFERY are held by the Conjoint Board in spring, summer, and autumn. Candidates must comply with the requirements of the Gen. Med. Council (v. *supra*) re Prelim. examn. and Registration of students. The *First Prof. examn.* (fee, 15 gs.) comprises Chem. and Physics and Biol. The *Second* (fee, 10 gs.), Anat. and Physiol. and Histol. The *Third* (fee, 9 gs.): (a) Path., (b) Mat. Med., Pharmacy, Therap.; (c) Forensic M. and Pub. Health. The *Final* (fee, 6 gs.): (a) Med., including Fevers, Mental Diseases, and Dis. of Children; (b) Surg., including Operative and Ophth. S.; (c) Midw. and Gyn., Vaccn., and Dis. of Newborn Children.

Institutions recognized for instruction in subjects of the First examn. include numerous schools in the U.K., and also the Univ. of Cape Town and Transvaal Tech. Inst. (now Univ. Coll.). Institutions recognized for certification of studies include: in Canada—the Univs. of Dalhousie, Laval, McGill, Toronto, Trinity Coll. and Vict. Coll. Tor.; Bishops' Coll., Montreal; R.C.P.S., Kingston; Trinity Med. Sch.; in Australia—Univs. of Melb. and Syd., Adelaide Infirmary, Melb. Hospl., Alfred Hospl., Syd. Infirmary, Prince Alfred Hospl., Genl. Hospls. of Hobart and Launceston; in N.Z.—Dunedin Hospl.; in Cape Town—S. African Coll.; in India—Med. Colls. of Bengal and Madras; the Ceylon Med. Coll.

Candidates who have passed in any of the required subjects at examns. conducted by any Licensing Body recognized by the R.C.P. and R.C.S. may be exempted from further examn. therein.

Examns. for the LICENCES OF THE R.C.P.I. are held early in Feb.,

May, and Nov., and at specially appointed times. That for the *Licence in Medicine* (fee, 15 gs., or for Special examn., 20 gs.) comprises Practice of M., Clinical M., Path., Med. Jurispr., Midw., Hygiene, Therap. It is open to a Registered Med. Practitioner of the U.K. or on the Colonial or Foreign List of the Gen. Med. Council if the College be satisfied as to his character and his courses of study and examns. passed by him. The examn. for the *Licence in Midwifery* (fee, 5 gs., special, 10 gs.) is open to Registered Med. Practitioners: (a) of the U.K. who have (i.) obtained the Lic. in Med. of the College or have passed the examn. therefor, or (ii.) satisfied the College as to character and as to course of study pursued and examns. passed; (b) of 5 yrs' standing who have so satisfied the College. Entrants under (b) are exempt from the examn. by printed questions.

Examns. for MEMBERSHIP OF THE R.C.P.I. are held in Feb., June, and Nov., and at specially appointed times. Applications for admission should reach the Registrar by 2nd week in Jan., May, Oct. Fee, 35 gs. or for L.R.C.P.I., 20 gs.; extra for Special examn., 10 gs. The examn. is open to Registered Med. Practitioners: (a) who have held for at least a year a Licence in Med. of a College of Physicians of the U.K., or a degree (B. or D.) of any Univ. in the Empire recognized for registration purposes by the Gen. Med. Council; or (b) who hold a foreign qualification, entitling to practise Med. and Surg. in their own countries, obtained after a course of study deemed by the College to be satisfactory. The testimony of a fellow or member of the College or a F.R.C.P. Lond. or Edin. as to professional conduct and moral character is also required. The Diploma of membership carries with it the Licence if this has not been already obtained. Exemption from part of the examn. may be allowed by the Court of Examiners on a consideration of evidence that a candidate has "improved the Art or extended the Science of Med."

For admission to the FELLOWSHIP OF THE R.C.P.I. (fee, £35; stamp duty, £25) the candidate must have been a member of the College for 1 yr. Minimum age, 27. It is open to women.

The R.C.S.I. holds examns. (fee, 5 gs.) for a LICENCE IN SURGERY at the same times as those of the Conjoint Board. They are open at the discretion of the Council to Registered Med. Practitioners who have passed through a course of study and examns. equivalent to those required by the Conjoint Board and an examn. in Arts recognized by the Gen. Med. Council. Fee for Licence, 25 gs., including 5 gs. examn. fee.

The R.C.S.I. also holds examns. for a DIPLOMA IN MIDWIFERY. Candidates must have a registrable qualification and produce certificates of attendance on Lectures, 6 months' Hospital practice and conduct of 30 labour cases. Fee, 15 gs.

The examn. for the FELLOWSHIP OF THE R.C.S.I. is in 2 parts. Fee for each, 5 gs. For admission to the Final part a candidate must be a Licentiate or Graduate in Surg. of a Univ. or licensing body recognized by the Gen. Med. Council. Minimum age, 25. Fee on admission to Fellowship, 40 gs., or for Licentiate of the College, 25 gs.

## THE SOCIETY OF APOTHECARIES OF LONDON

Incorporated by Royal Charter, 1617. *Address*—Water Lane, Queen Victoria St., London, E.C.4.

Examinations for the Diploma of Licentiate in Medicine, Surgery, and Midwifery (L.M.S.S.A.) are held in London, the Primary examn. (fee, 5 gs.) in Elem. Biol., Chem., Materia Medica and Pharmacy, Anatomy, Physiology, and Histology in Jan., April, July, and Oct., the Final (fee, 15 gs.), monthly, except in Sept. For admission to either, certificates are required, showing in detail the course of Medical study pursued by the candidate with particulars of instruction received, practice and operations performed, and offices held. The course covers 5 yrs. in all. Exemption from the Primary subjects may be obtained by proving that equivalent examns. recognized by the Society have been passed.

## THE ROYAL COLLEGE OF VETERINARY SURGEONS

*Address*—10 Red Lion Sq., London, W.C.1. *Affiliated Colleges*—Royal V. College, Camden Town, London, N.W.1; The V. School of the University, Liverpool; Royal (Dick) V. College, Summerhall, Edinburgh; The V. College, Buccleuch St., Glasgow; Royal V. College of Ireland, Ballsbridge, Dublin.

A candidate for the *Membership* must, after passing one out of a list (similar to that of the Gen. Med. Council, v. *'supra'*) of recognized Preliminary Educational examns., attend courses in one of the Affiliated Colleges during 4 yrs. as follows: 1st year (from which exemption is given under certain conditions to graduates in Arts, Science, or Medicine): Anat. of Domestic Animals; Chem. and Elem. Physics; Biol., Elem. Zool., and Botany. 2nd year: Anat. of Dom. Animals; Physiol. and Histol.; Stable Management, Shoeing, etc. 3rd year: Path., Bact., and Protozoology; Mat. Med., Tox., and Practical Pharmacy; V. Hygiene and Dietetics. 4th year: Principles and Practice of V. Med. and V. Surg. and Obst.; Meat Inspection. An examn. (fee, £5) is held at the end of each year's course.

Qualifications for *Fellowship*: 2 yrs.' practice after obtaining the membership, and a thesis on results of original research followed by oral and, if deemed necessary, written and practical examns. Fee, 15 gs.

For admission to the examn. for the *Diploma in V. State Medicine* it is necessary after graduation as M.R.C.V.S. to take a special course at a V. School and undergo training under a County or Municipal V. Inspector. Fee, £5:5s.

## THE ROYAL SANITARY INSTITUTE

Founded 1876. Incorporated 1888. *Address*—90 Buckingham Palace Road, London, S.W.1. Branches in New Zealand and S. Africa.

The Institute is a composite body, representative of the various sciences allied to sanitation and public health, and its members (nearly 5000) include Medical men, Engineers, Architects, Municipal Officers, etc.

Qualifications for (1) Membership: evidence of attainments of standard indicated by certain of the Inst.'s own certificates, a Degree of a University, or Diploma of a Medical Corporation recognized by the Council, San. Science certif. of Surveyors' Instn. (v. p. 545), Testamur of the Instn. of Munic. and County Engineers (v. p. 515); (2) Associate-ship: the Inst.'s certif. for Sanitary Inspector or other evidence of attainments of similar standard. Annual Subsn. for Members, 1½ to 2 gs.; Associates, 1s. to 1 g. Fellows are elected from Members of at least one year's standing.

Examinations held by the Institute (fee, 4 to 5 gs.): (1) Sanitary Inspector, under P.H. Act, 1875; (2) Advanced Knowledge of Inspectors' duties; (3) Inspectors of Meat and Foods; (4) Smoke Inspectors; (5) San. Science as applied to Buildings, etc.; (6) Women Health Visitors and School Nurses; (7) Maternity and Child Welfare Workers; (8) School Hygiene, including Elem. Physiol.; (9) Tropical Hygiene for Inspectors. (1) and (3) are recognized by Loc. Govt. Boards of England, Scotland, and Ireland, (6) by the L.G.B. of England, (8) by L.C.C. Educn. Committee and other Educational Authorities.

The examns. are held in London and in numerous other towns in the U.K. and in India, Burma, Canada, Australasia, S. Africa, Hong-Kong, West Indies. Examns. for San. Surveyors and San. Inspectors are held in Bombay and Rangoon in co-operation with the Local Governments.

Courses of Lectures and Demonstrations are held in London in spring and autumn. Fees, 3½ to 5 gs.

The Parkes Museum, founded 1876, became part of the Inst. in 1888. It serves as a public demonstrating school. The Inst. has a large Library, including many foreign works. Sessional meetings, about ten yearly, are held in London and other large towns.

Congresses and exhibitions have been held almost every year since 1877.

*Publications*: *Journal* and numerous pamphlets.

## ROYAL INSTITUTE OF PUBLIC HEALTH

Founded 1886. Incorporated 1892. *Address*—37 Russell Square, London, W.C.1.

The Institute provides courses of Instruction qualifying for admission to the examinations for the Degrees and Diplomas in Public Health

of all the Univs. and Medical Corporations. Fees for Laboratory Instruction: 6 months, 22 gs.; P.H. Admn., 15 gs.; Fever Hosp. Admn., 3 gs.; Special Lab. Fees., Chem. or Bact., monthly, 6 gs., 3 months, 15 gs. Courses of free lectures are also given in the Lecture Hall of the Inst. Special lectures open to Fellows, Members, and Students. Subscription, 1 g. p.a.

The Laboratories are recognized as a place of research in connexion with the Beit Memorial Fellowships. Researches and Clinical Examns. are undertaken for Public Bodies and Med. Practitioners. Culture media of all descriptions are supplied.

Reference Library containing all important P.H. Works, Govt. Reports, etc.

Congress to be held at Scarborough, Whitsun, May 16-21, 1923.

*Publication.* *Journal of State Medicine*, monthly, 2s.

## INSTITUTE OF HYGIENE

Founded 1903. *Address*—33-34 Devonshire St. (Harley St.), London, W.1.

Examinations for Certificates and Diplomas (advanced) are held at various universities throughout the U.K. on the second Saturday of Jan. and of June each year. Subjects: General Hygiene, School H., Home Nursing and First Aid, Mothercraft, Food and Dietetics, Cooking, Physical Training, School Nursing, and Health Visiting. Fee, 1 g. to 2 gs. Complete syllabus with list of Text Books, 2s. Specimen questions, 1d.

The Certificate and Diploma in General Hygiene qualify for nomination as Associate and Member respectively of the Inst.

Public Lectures are regularly given throughout the year in the Lecture Hall. The Inst. has Laboratories for analytical and bacteriological investigation, and a Museum of Hygiene open to the public free throughout the year.

## XII

## THE INSTITUTION OF MINING AND METALLURGY

Founded 1892. Incorporated by Royal Charter 1915. Objects: Advancement of the Science and Practice of Mining in respect of minerals other than coal and of Metallurgy in respect of metals other than iron; and to afford a means of facilitating the acquisition and preservation of that knowledge which pertains to the profession of a Mining Engineer and Metallurgist. *Address*—Cleveland House, 225 City Road, London, E.C.1. *Telegrams*—"Minanmet, London."

Qualifications for Membership (M.Inst.M.M.): minimum age, 30, having been for at least 5 yrs. in full charge of important mining or metallurgical operations or in practice as a Consulting Mining Engineer or Metallurgist; if born after Dec. 31, 1894, a regular course of at least 3 yrs.' study in pure or applied science. Qualifications for Associateship (Assoc.Inst.M.M.): minimum age, 25, having been engaged in mining or metallurgical pursuits for not less than (a) 2 yrs. if a graduate of the R.S.M. or other mining college or school of equivalent standing; (b) 3 yrs., or such longer period as Council may determine, if a graduate of some other college or school; (c) 6 yrs. in other cases. The minimum age for admission as student is 18. A candidate for either Membership or Associateship must be actually practising his profession at the time, and must satisfy the Council as to his fitness for admission. The Council may elect a candidate as Member in consideration of his position and attainments in Science or Technology. Entrance fee and annual subsn. for Member, 5 gs. each; Assoc., 3 gs. Students pay subsn., 1g. (over 25—1½ g.) p.a. and no entrance fee.

General meetings for discussion of papers monthly, Oct.-May. Large Library, reading- and writing-rooms. Publications: *Bulletin*, monthly (£1:11:6 p.a.), and *Transactions* annually (£1:11:6 p. vol.) may be purchased by non-members. Gold medals, etc., are awarded by the Instn. for promoting its objects. The Instn. is closely associated with the Royal School of Mines.

## INSTITUTION OF MINING ENGINEERS

Established 1889. Incorporated by Royal Charter 1915. *Address*—Cleveland House, 225 City Road, London, E.C.1. *Telegrams*—"Instimini, London."

The Instn.'s objects and purposes are "the advancement of coal and iron-ore mining and allied industries, and the promotion of the acquisition of the knowledge necessary for the control and direction of mining operations in relation to stratified deposits." It is a federation

of the Manchester Geol. and Mining Soc. ; the Midland Counties Instn. of E. ; the Midland Instn. of Mining, Civil, and Mech. E. ; the Mining Inst. of Scotland ; the North of England Inst. of Mining and Mech. E. ; the North Staffs Inst. of Min. E., and the South Staffs and Warwickshire Inst. of Min. E. There is no separate membership of the Institution apart from membership of one of the Federated bodies.

Conditions of admission to membership since Jan. 12, 1916, include : (a) regular education and training as a Min. E., and 5 yrs.' work in a responsible position in practical Mining ; or (b) First-Class Certif. of Competency under Coal Mines Act, and tenure of post as Manager, Asst. Manager, Under-Manager, or Chief Surveyor ; or (c) position or attainments rendering his membership desirable in the opinion of the Council. There are also Associate Members, Hon. Members, Associates, and Students.

*Publications.* *Transactions* (in which are included Procdgs. of Federated Instns. as well as those of the Instn. itself), 64 vols. Price to non-members, 36s. each for current volumes ; back volumes at varying rates.

## THE IRON AND STEEL INSTITUTE

Founded 1869. Incorporated by Royal Charter 1899. *Address*—28 Victoria St., London, S.W.1.

*Qualifications* : (1) for Membership—minimum age 21 ; being practically engaged in iron or steel works or being a person of scientific attainments in metallurgy or specially interested in the applications of iron and steel. Entrance fee, 2 gs. ; annual subsn., 3 gs. (if resident abroad, 2½ gs.). (2) For Associateship—maximum age, 24 ; being (a) Student of Metallurgy taking a course at a Univ., Univ. College, or Tech. School, or (b) pupil or apprentice in metallurgy or engineering, or (c) employed in some practical or scientific capacity in met. or engin. works. Annual subsn., 1 g.

Meetings in May and Sept. for reading and discussion of papers. Library, reference and lending ; printed catalogue. Information Bureau ; service not restricted to members.

*Carnegie Research Fund*—£20,000, interest on which is used for grants to assist metallurgists and students in conducting researches.

*Publications.* *Journal* in 2 vols. annually ; *Carnegie Scholarship Memoirs*, 1 vol. annually.

## THE INSTITUTE OF METALS

Founded 1908. Incorporated 1910. *Address*—36 Victoria St., London, S.W.1.

Local Sections in Birmingham, Glasgow, London, Newcastle-on-Tyne, Swansea, Sheffield.



Qualifications for Ordinary Membership (M.Inst.Met.): minimum age, 24; occupying a responsible position, being either engaged in the manufacture, working or use of non-ferrous metals and alloys or a person of scientific, technical or literary attainments connected with or interested in the metal trades or with the application of non-ferrous metals and alloys. Limits of age for Student Members, 18-25. Entrance fee and annual subsn. for Ordinary Members, 2 gs. and 3 gs. Students, 1 g. and 1 g. Associate members of local sections pay a nominal subscription and do not receive the *Journal*. *Fellows* are limited in number to 12. They are chosen by Council for having rendered eminent service to the Assocn.

The Inst. aims at "the advancement of the non-ferrous metals industry and the associated sciences," by the co-operation of manufacturers, users and scientific investigators. It concerns itself rather with the manufacture and working of metals and alloys and with their properties and modes of treatment and testing, than with the production of metals from their ores. The leading features of its work are the holding of sessions in the spring and autumn and an annual "May lecture" given by some acknowledged master of his subject; in addition a special "Practical lecture" is given annually in the autumn by an expert non-ferrous technician.

The *Journal* contains in addition to the proceedings of all the meetings abstracts and reviews of all the more important current publications, British and foreign, bearing upon non-ferrous metals. Price to non-members, £3:5s. for the two annual vols. (post free).

*Library* with all the current journals of interest to those concerned with metals. Nucleus museum.

*Research* is encouraged, directed, and even undertaken by means of a series of special committees, the most important being the Corrosion Research Committee which began its work in 1910 and after receiving substantial help from the Govt. Dept. of Scientific and Industrial Research was augmented by the addition of representatives of several Govt. Depts. and Professional Institns. Funds were provided by Sir George Beilby for enabling the Inst. to reward an important research, still continuing, on "The Solidification of Metals from the Liquid State."

The number of members in 1922 was 1440.

## INSTITUTION OF PETROLEUM TECHNOLOGISTS

Incorporated 1914. *Address*—5 John Street, Adelphi, London, W.C.2.

Conditions of admission to associate membership (A.M.Inst.P.T.) since June 17, 1914, include (a) good general and scientific education, (b) at least 2 yrs.' practical experience in a position (held at time of application) as petroleum technologist.

*Publications.* *Journal*, quarterly, 7s. 6d. (free to members). *Library Catalogue* (with history, regulations, etc., of the Instn.), 2s.

## XIII

## THE CHARTERED INSTITUTE OF PATENT AGENTS

Founded 1882. Incorporated by Royal Charter 1891. *Address*—  
Staple Inn Buildings, London, W.C.1.

Under the Patents and Designs Acts, 1907 and 1919, it is illegal to practise as a Patent Agent without being duly registered. The Register of Patent Agents is kept by the Institute in accordance with the Board of Trade's Rules of 1920.

*Examinations* are conducted or recognized by the Inst. for the two purposes of Registration of P.A.'s and the admission to the Inst. of Fellows, Associates and Students.

The Inst. recognizes as Preliminary examns. the Matricn. examn. of any Univ. in the U.K., the examns. recognized by the Board of Educn. as approved examns. in respect of Secondary Schools, Nos. 1a, 2, 4a, 8(a), 9, 10, 13, 15c, 16, of the list on p. 550, and several others.

The Inst. holds each year (i.) Intermediate (fee, 2 gs.), and (ii.) Final examns. (fee, 3 gs.), qualifying for Registration. Latest date for entry, April 1. Subjects of (i.): A. Patent Law and Practice, Designs, Trade-marks, Foreign Law, the reading of Mechanical Drawings; B. Manufactures, Science, and the preparation of Mechanical Drawings. Subjects of (ii.): A. Preparation of Specifications for British Colonial and Foreign Patents; B. Interpretation of British Specifications. Candidates for admission to (i.): must have passed one of the approved Prelim. examns. and (a) have served 3 yrs. as a pupil or technical asst. to one or more registered P.A.'s or (b) have so served for 2 yrs. and attended a 2 yrs.' course at an approved Tech. Coll. or had 2 yrs.' approved practical experience, or (c) have so served for 1 yr. and taken a degree at a Univ. of the U.K. or attended a 3 yrs.' course at an approved Tech. Coll. or had 3 yrs.' approved practical experience, or (d) be entitled to practise as a Solicitor or (Scotland) Law Agent.

Candidates for admission to (ii.) must have passed (i.) and have served as above for a period of 2 yrs. in excess of term prescribed under (a), (b), or (c) above, as case may be, or be entitled as in case (d).

Minimum age for membership of the Inst.—25. Other qualifications: For Fellowship, (a) having ceased to be an Associate by reason of being in practice on own account as P.A.; (b) having passed Final examn.; (c) special dispensation in case of candidate of exceptional standing or experience. For Associateship (not applicable to person registered as a P.A.): (a) being qualified and able by reason of connexion with the Law, Science, or the Arts, to advance the objects of the Inst.; (b) being pupil or asst. of 3 yrs.' standing of a Fellow or a Student attached to the Inst. and having passed Intern. Examn. For Foreign Membership: having been established in practice as P.A. for a sufficient time not less than 3 yrs. in a British Colony or Dependency or in a Foreign Country and neither having an office nor practising in the U.K.

Minimum age for " Studentship "—18. Other qualifications : being an articled pupil of a Registered P.A. and having passed an approved Prelim. examn.

Fellows may use the initials C.P.A. after their names.

Entrance fee for Fellow, 3 gs.; Assoc., 1 g.; Foreign Members, 2 gs.; Student, 1 g. Annual subs.: for Fellow, 3 gs.; other classes, 1 g.

## XIV

## PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

*Address*—17 Bloomsbury Sq., London, W.C.1.

Examinations (open to women as well as men) are held in London and Edinburgh in Jan., April, July, and Sept. or Oct. : the *Qualifying* examn. (fee, 12 gs.), for registration as Chemist and Druggist under the Pharmacy Act, 1868 ; the *Major* examn. (April and July, fee, 3 gs.), for registration as Pharmaceutical Chemist under the Pharmacy Act, 1852. No person can be admitted to any portion of the *Qualifying* examn. who is not a *Registered Apprentice or Student*, and this involves passing in English, Arith., Algebra, Geom., and 2 optional subjects at not more than 3 approved examns. It is recommended that one of the optional subjects be Latin. Among the approved examns. are those numbered in the list on p. 550 as 1, 2, 3, 4, 5, 6, 7 (Junior), 8, 9, 9a, 10, 10a, 11, 12, 13, 13a, 13b, 13c, 14, 16, 16a, 19, 20, 21, 23, 23a.

In 1921 the *Qualifying* examn. was passed by 1233 persons, the *Major* examn. by 39.

The Dean of the Society's *School* is recognized by the Univ. of London, v. p. 144.

## XV

## INSTITUTE OF PHYSICS

Founded 1918 by co-operation in the first instance of the PHYSICAL, the FARADAY, and the OPTICAL Societies, and incorporated under the Companies' Acts in 1920. Other participating Societies are: The ROYAL MICROSCOPICAL Society and the RONTGEN Society. *Address*—10 Essex St., Strand, London, W.C.2.

Corporate members consist of two classes: *Associates* (A.Inst.P.) and *Fellows* (F.Inst.P.). Qualifications for Associateship include the passing of an examn. held by the Institute or a recognized equivalent examn.; and, in addition, a year's approved research or manufacturing experience. The examn. may be dispensed with in the cases of candidates with qualifications approved by the Board. A candidate for Fellowship has, in addition to his academic qualifications, to show a total record of 5 years' experience either in research or manufacture or in any position requiring a thorough knowledge of Physics. Entrance fees, 1 g. and 2 gs. Annual subsns. 1 g. and 2 gs. All classes of membership are open to women on the same terms as to men.

An *Appointments Register* and a *Panel of Consulting Physicists* are maintained.

A series of Lectures on "Physics in Industry" was instituted in 1922, and it is intended to publish them when the series is complete.

## XVI

## CHARTERED INSTITUTE OF SECRETARIES

## OF JOINT-STOCK COMPANIES AND OTHER PUBLIC BODIES

Founded 1891. Incorporated by Royal Charter, 1902. *Address*—59A London Wall, London, E.C.2. Branches at Birmingham, Bradford (for W. Yorks), Liverpool, Manchester, Newcastle-on-Tyne, Nottingham (for N.E. Midlands), Sheffield, Cardiff, Glasgow; and overseas at Montreal, Brisbane, Melbourne, Sydney, and Johannesburg.

Examinations are held in London and at various other places both at home and abroad in June and Dec. A candidate must either enter into Articles of Clerkship with a member of the Inst. for a period of 4 yrs. (if a graduate, 3 yrs.) or obtain registration as *Student*, for which a certificate that he is *bona fide* in course of preparation for the secretarial profession is required.

The *Preliminary* examn. (fee, 1 g.; min. age, 16) comprises English (Grammar, Compn., Dictn.), Engl. Hist., Geog., Elem. Maths., one foreign lang., and one of: Maths. (more Advanced), Physics, Chem., Elem. Mech., Stenography. Exempting examns. include matricn. of any recognized Univ. in the Empire, and those in list on p. 550 numbered 1, 2, 7, 8 (b), 9 or 10, 11, 12, 13, 14, 16, 19 (Higher Grade), 23a, and the Prelim. of Inst. C.A. or Soc. of Incorporated Accountants and Auditors, provided, in case of 16, that the candidate has passed in the above specified subjects. The Council may also exempt any candidate over 21 yrs. of age as to whose educational status they are satisfied.

For admission to the *Intermediate* (fee, 2 gs.; min. age, 21) a candidate must have passed or been exempted from the Prelim. Graduates in Arts, Commerce, Law, or Science of recognized Univs. in the U.K., and persons who have passed the Final of the Bar Council, Law Soc., Inst. C.A., or Soc. of Inc. Accts. and Audrs., are allowed a pass in the Interim. on attaining the usual standard of proficiency in any 3 of the specified examn. subjects they select, but must pass the Final as a whole before election to membership.

For admission to the *Final* (fee, 2 gs.; min. age, 21) a candidate must have passed the Interim. The subjects are: Economics, Sec. practice and duties, Law and practice in connexion with meetings, Book-keeping and Accts., Merc. Law, an approved foreign language, and one special law subject (*e.g.* Company Gas, Water, Insurance) or Banking and Exchange.

*Associate Membership* can be obtained after 6 yrs.' service with a Public Coy. or Body; *Fellowship*, after 8 yrs.', of which 3 have been as Secy. or Asst. Secy.

*Publications*: *Yearbook*, *Secretarial Practice*, *The Secretary* (monthly, 1s.).

## XVII

## SURVEYORS' INSTITUTION

Founded 1868. Incorporated by Royal Charter, 1881. *Address*—12 Great George St., Westminster, S.W.1.

Professional examns. (fees: Interm. or Final, 4 gs.; Direct Fellowship, 5 gs.; applications receivable in Sept.) are held in March in London, Glasgow, and Dublin, and a Prelim. examn. (fee, 1½ g.) in Jan. in the same places and Manchester.

The *Preliminary* (min. age, 16), for admission of students comprises Elem. Maths., Hist., Compn., and one of: Latin, French, German, Inorg. Chem., Botany, Geol. A candidate must be a pupil of a Surveyor or studying at one of the Univs. of the U.K. or their Affiliated Colleges or one of the following: the Agr. Coll., Uckfield; Harper Adams Agr. Coll., Newport; University Coll., Reading or Southampton; Seale-Hayne Agr. Coll., Newton Abbot. He is expected to reach the standard of examn. No. 8 (*b*) of the list on p. 550.

Candidates for admission as *Student* (min. age, 18) are exempt from undergoing the Prelim. if they have passed any of the examns. Nos. 7, 8 (*a*), 9 or 10, 9*a* or 10*a* (Hons.), 11, 12, 13, 14, 16, 19 (Interm.), or the Matricn. examn. of any Univ. in the U.K., Inst. C.E. Studentship, Prelim. of Inst. C.A., R.I.B.A., Law Soc. or Sandhurst or Woolwich, or Middle or Senior Grade Irish Interm. Education Board examns.

For admission to the (i.) *Intermediate* (min. age, 19), a candidate must, unless at one of the institutions above mentioned, be actually engaged in an office where he has opportunities of obtaining practical experience in the profession. The subjects are grouped thus: I. chiefly Land Agency, II. chiefly Valuation, III. chiefly Building or chiefly Quantities, IV. chiefly Mining. A candidate may elect any one of these subdivisions. For the (ii.) ordinary *Final* (min. age, 21), a candidate must have passed the Interm. in the same subdivision which he takes for the Final. The (iii.) *Direct Fellowship* examn. (min. age, 30) may be taken, without having passed (i.) or (ii.), by a candidate who has been in practice on his own account for 5 yrs.

For election as *Professional Associate* (P.A.S.I.) a candidate must have passed (i.) and (ii.), and be in practice as a Surveyor on his own account or employed as an Asst. in a Surveyor's office. For admission as Fellow a candidate must have passed either (i.) and (ii.) or (iii.), and had 5 yrs.' experience as, and still be, either a Principal or Responsible Manager in an established business or a Head of a Dept. in the office of a public body reporting direct to his Board or Council.

*Scholarships* worth £80, £60, and £50, tenable for 3 yrs. at any Univ. in Great Britain, have been established by the Council.

## XVIII

## TEACHERS' REGISTRATION COUNCIL

Constituted by Order in Council, 1912. *Address*—47 Bedford Sq., W.C.1.

Conditions of Registration (fee, £2): (a) a degree or other qualification approved by the Council; if obtained in respect of a technological subject the applicant must have spent 36 months, after attaining the age of 16, in the practice of the profession or industry in question, and of this period 12 mos. must have been concurrent with or subsequent to the course for the degree (or other qualification); (b) successful completion of a course, extending over at least 1 academic year, or its equivalent, of training in the principles and methods of teaching, carried on under conditions approved by the Council and accompanied by practice under supervision; (c) experience as a teacher in educational institns. accepted for the purpose by the Council for a period varying according to circumstances, but in no case less than 3 academic years, of which 2 must have been in one institn. or under one governing body unless the whole period has been spent in not more than 2 institns.

Conditions (a) and (b) are waived in the case of a teacher who has had not less than 3 academic yrs.' experience as Recognized Teacher in Univs. and institns. of Univ. rank approved by the Council for this purpose. Condition (b) may be modified in other cases where the Council is satisfied that facilities for the prescribed training do not exist.

EDUCATION AND TRAINING FOR TEACHING IN  
ENGLAND AND WALES

The Board of Education have recently consolidated their Regulations on this subject, and introduced several changes designed to promote the unity of the teaching profession and to remove barriers which have existed between its different branches, while giving ample scope for freedom and variety, which they regard as essential in the training of teachers, and encouraging Training Colleges to plan their schemes of training on different lines so as to provide for the requirements of the various kinds of school included in the national system of education.



Courses of Training qualifying for the Board's Certificate for Teachers in *Elementary Schools* are provided in independent Training Colleges and also in the Training Departments which form part of the work of all the Univs. (Wales—the Constituent Colleges, except Swansea; Durham—Armstrong College), both for men and (except Cambridge) for women, and also in the Univ. Colleges, Nottingham, Reading, and Southampton.

The Board recognizes for grants in respect of courses preparatory to teaching in *Secondary Schools*: (i.) Departments of all the Univs. except Sheffield, (ii.) Reading Univ. College, (iii.) 7 other Colleges. Cambridge provides for men only, Leeds and Reading for women only.

Candidates for admission as *Recognized students* must, unless this condition is specially waived by the Board in any case, be British subjects ordinarily resident in the U.K.; they must, as a rule, be over 18, and must at least be over 17 on the first day of the academic year for which they are admitted, must give satisfactory evidence of health, character, and suitability for the profession, and must have passed the Prelim. examn. for the Elem. Sch. Teachers' certificate or, subject to provisos ensuring adequate proficiency in English, History, Geog., and Arith., one of the examns. in the list on p. 550. numbered 7, 8 (b), 9, 10, 11, 12, 13, 14, or some other examn. as to which the Board are, in particular cases, satisfied that it is equivalent to these in range and standard; they must sign a declaration of intention to follow the profession of teacher in an Approved School. A married woman is not admissible without the special sanction of the Board.

Candidates who satisfy the above requirements as to age, attainments, and character may be admitted as *Private students* without giving the prescribed Undertaking, but no grants will be payable on their account except in certain special cases, and the fees chargeable to them will be correspondingly higher.

The principal *types of courses* approved are: (i) 4-year, including 3 yrs. of study for a Univ. degree followed by a year of professional training; (ii.) 2-year, including a period of prof. training taken concurrently with a period of academic study; (iii.) 3-year, providing a year of further training for selected students who have completed (ii.); (iv.) 1-year—(a) prof. training for graduates or other advanced students, or (b) a year of partly prof. and partly academic study for Certificated Teachers. The foregoing give a suitable training for teaching in Public *Elementary Schools*. Other types are: (v.) in preparation, extending over not less than a full academic year, for teaching in *Secondary Schools*; (vi.) professional instruction, extending, as a rule, over not less than a full academic year, for teaching in *Continuation Schools*; (vii.) in preparation for teaching *Domestic Subjects*.

As regards (i.), a student may be admitted to the 2nd, 3rd, or 4th yr. if he has completed 1 yr., 2 yrs., or the whole of the course for a Degree before entering the Training Dept. and is over 18, 19, or 20 as the case may be. A student who has pursued a course of type (i.) will not as a rule be certificated as a Teacher unless he has passed a Final examn. for a Degree, but the Board may regard as qualified one who has failed to pass if he is specially recommended by the Univ. Authorities,

or he may be recognized as a temporarily Certificated Teacher and subsequently qualify for permanent recognition.

(ii.) Suitable Univ. examns. forming recognized stages in courses for degrees may, subject to certain conditions, be approved for individual students in lieu of the Board's Final examn. Concessions similar to those above mentioned may be made to students who fail in a Final examn. for a degree.

(iii.) may include preparation for a Final examn. for a Univ. degree, provided an advanced course in the Principles of Teaching is included in it or taken separately, and certain other conditions are fulfilled.

For (iv.) any candidate who has not already served as a Certificated Teacher for 4 yrs. must be over 19 and have passed the Final examn. for a Univ. degree, or the examn. for the Diploma of Assoc. in Letters or Science of Univ. College, Reading, or an approved School Leaving Certif. examn. conducted by a Univ., including special advanced papers in English, a foreign language, and one other subject, or the Oxford or Cambridge Higher Local, including Arith. and English, Maths. or Science, Languages or Hist. or Geog., or the Nat. Froebel Union Higher certif., or some corresponding or higher examn. approved for the purpose. No 1-year student may be allowed to enter for an examn. which forms a recognized stage in the course for a Univ. degree.

(v.) Persons who have obtained a Univ. degree in Honours or its equivalent may be admitted as Recognized students, and will be eligible for maintenance as well as tuition grants if they sign the prescribed Undertaking. Others who have obtained a Univ. degree or a Special Honours Higher Local certif. (Ox. and Camb.) fulfilling the special requirements of the Board may earn tuition grants for the Dept. even though not giving the prescribed Undertaking. Students who have been admitted for a 4-year course and obtained a Univ. degree in Honours or the equivalent may, on the recommendation of the Univ. authorities, take a type (v.) course instead of the fourth year of the type (i.) course.

A person, not under 21, who has obtained an approved degree in a Univ. of recognized standing or a Special Honours Higher Local certif. (Ox. or Camb.) fulfilling the special requirements of the Board may on certain conditions be recognized as a teacher in training in an approved Secondary School, the course extending over at least a full school year. If such a teacher has obtained an approved degree in Honours or its equivalent the School will be entitled to a tuition grant.

Teachers of any ordinary subject of instruction in recognized schools, etc., are eligible for *Studentships*: (a) "Special," not exceeding £100, for full-time courses of advanced study or research either at Univs. or institns. of Univ. rank in the British Empire, or at approved places in foreign countries; these are intended for teachers who are able to obtain a term or longer period of grace from school teaching for the purpose, not for the whole or part of an ordinary degree course; (b) "Assisted," not exceeding  $\frac{2}{3}$  of the fees of the proposed course, for approved part-time courses in Univs. or institns. of Univ. rank;

teachers so assisted would continue their ordinary teaching work at the School.

The League of the Empire (124 Belgrave Rd., London, S.W.1) promotes schemes for the interchange of teachers between the Mother Country and the Dominions. In 1920 the London County Council ruled that service in any State School of the Dominions should count as London service for the purposes of such interchange. Canadian, Australian, and New Zealand Education Departments have reciprocated.

An Overseas Education League, under the auspices of the Govts. of the Dominion of Canada, Newfoundland, New Zealand, and the Depts. of Education of Alberta, B.C., Manit., N.S., N.B., Ont., P.E.I., Que., Sask., New S. Wales, Vict., W. Aust., Natal, and Sierra Leone, undertakes the organization of official visits of Teachers to Great Britain and other parts of the Empire, interchange of Teachers and School Inspectors within the Empire, etc. Office of the Hon. Organizer in Canada (the Gen. Secy., National Council of Education)—Parliament Buildings, Winnipeg.

The Fellowship of the Maple Leaf for the supply of British teachers for Western Canada is interested primarily in Elementary Schools, but also places teachers in Private Schools, High Schools, and Universities. Office—13 Victoria St., Westminster, S.W.1.

## XIX

### PROFESSIONAL OPENINGS IN THE KING'S DOMINIONS OVERSEAS

Information on this subject is available in the *Professional Handbook* issued in 1920 by the Oversea Settlement Office, 3-4 Clement's Inn, London, W.C.2, in 4 Parts: I. Barristers and Solicitors, Notaries Public; II. Physicians and Surgeons, Dentists, Vet. Surgeons, Nurses, Chemists and Druggists; III. Civil Service; Clerks, Stenographers, Typists, and Accountants; Governesses, Teachers; IV. Architects and Engineers, Auctioneers, Commercial Travellers, Police, Surveyors. Price of each Part, 6d.

## XX

LIST OF EXAMINATIONS REFERRED TO IN THE  
PRECEDING APPENDICES

1. Oxford Responsions ;
- 1a. Oxford, First Public Examn. before Moderators ;
- 1b. Oxford, Prelim. Examn. in Jurisprudence ;
2. Cambridge Previous ;
3. London Matriculation ;
4. Durham Matriculation ;
- 4a. Durham, Examn. in Arts for the 2nd year ;
5. Wales Matriculation ;
6. Joint Board of Northern English Univs. (Manc., Liv., Leeds, Sheff., Birm.) Matricn. ;
7. The same Board's School Certificate ;
8. Oxford and Cambridge Schools Examn. Board's (a) Higher, (b) School, (c) Lower Certificate ;
9. Oxford School Certificate (Senior Local) ;
- 9a. Oxford Junior Local ;
10. Cambridge School Certificate (Senior Local) ;
- 10a. Cambridge Junior Local ;
11. Bristol School Certificate ;
12. Durham First School Certificate ;
13. London General School ;
- 13a. London General (School) Matricn. ;
- 13b. London Higher School ;
- 13c. London Junior School ;
14. Central Welsh Board's Senior or Higher Certificate ;
- 15a. University College, London, Matricn. ;
- 15b. King's College, London, Matricn. ;
- 15c. City and Guilds (Engineering) College, London, Matricn. ;
16. College of Preceptors, Senior ;
- 16a. College of Preceptors, Junior ;
17. University College, Southampton, Special Entrance (Engineering) ;
18. Scottish Univs. Preliminary in Science ;
19. Scottish Educn. Dept. Leaving Certif. ;
20. Belfast Matricn. ;
21. N.U.I. Matricn. ;
22. Dublin General at end of Senior Freshman year ;
23. Irish Intermediate (Middle Grade) ;
- 23a. Irish Intermediate (Senior Grade) ;
24. Responsions at St. David's College, Lampeter.

## XXI

## MATRICULATION EXAMINATIONS BY JOINT BOARDS

UNIVERSITIES OF MANCHESTER, LIVERPOOL, LEEDS, SHEFFIELD, AND BIRMINGHAM (sometimes referred to as the "Northern Universities"). *Address* of the Secy. (J. M. Crofts), 315 Oxford Rd., Manchester. The examn. (fee, £2) is held at each of the Univs. in July and Sept. Candidates are required to satisfy the examiners at one and the same examn. in 5 subjects as follows:—I. English Composition combined with either English Literature or History; II. either Maths. or Latin; III. three other subjects not already taken under I. and II. chosen from: 1. Engl. Lit., 2. Hist., 3. Geog., 4. Greek, 5. Latin, 6. French, 7. German, 8. some other Approved Language, 9. Maths., 10. Mechanics, 11. Physics, 12. Chem., 13. General Expl. Sc., 14. Natural Hist., 15. Botany; provided that candidates who take Maths. under II. must include one of 4-8, and those who take Latin under II. must include one of 9-15. The several Univs. impose special conditions for entrance to certain Faculties.

Holders of the Matricn. Certif. or a certif. entitling to exemption from the examn. who require a certif. of having satisfied examrs. in subjects not appearing on their certifs. or in Addl. Maths. may be admitted to a Supplementary examn. (fee 10s., or, for single paper subjects, 5s.).

*Exempting Examns.* Those in the list on p. 550 numbered 1 and 2, London Intern. examn., First examn. in Arts, Sc., or Med. of an approved Indian Univ., Secondary Ed. Certif. of Egyptian Ministry of Ed., Final examn. of Law Soc. (in case of Barrister or Solicitor entering Faculty of Law), Special Army Ed. Certif. at Advanced Standard; also, subject to provisos, Nos. 3, 8 (b), 9, 10, 11, 12, 13, 14, 19; also at the Board's discretion other examns. of equal or higher standard.

A special Matricn. examn. for *candidates of mature years* (not under 23 on May 1 of year of application) has been instituted. Applications (with fee, £2, and birth certif.) will be received up to May 1.

SCOTTISH UNIVS., v. p. 220.

CANADA, v. pp. 281, 300, 357.

AUSTRALIA, v. p. 368.

S. AFRICA, v. p. 409.

## XXII

STUDENTS FROM OVERSEAS IN THE UNIVERSITIES  
AND UNIVERSITY COLLEGES OF THE UNITED  
KINGDOM \*

From AFRICA 1171, AMERICA 764, ASIA 1401, EUROPE 542, THE PACIFIC 253. Total, 4131. The number of students from each of the countries which contributed largely to these totals is given below :—

From EGYPT 298, including 67 at Birmingham, 20 at Cambridge, 10 at Leeds, 19 at Liverpool, 81 at London, 30 at Manchester, 11 at Sheffield, 19 at Edinburgh.

From SOUTH AFRICA and RHODESIA 803, including 82 at Oxford, 43 at Cambridge, 33 at Liverpool, 336 at London, 12 at Manchester, 142 at Edinburgh, 18 at Aberdeen, 33 at Glasgow, 76 at Dublin.

From CANADA and NEWFOUNDLAND 157, including 18 at Cambridge, 46 at London, 60 at Oxford and 23 at Edinburgh.

From SOUTH AMERICA 73, including 13 at Cambridge, 18 at London and 11 at Glasgow.

From U.S.A. 402, including 73 at Cambridge, 72 at London, 224 at Oxford and 27 at Edinburgh.

From the WEST INDIES and BERMUDA, 120, including 40 at London, 16 at Oxford 24 at Edinburgh and 11 at Glasgow.

From CHINA 119, including 11 at Cambridge, 13 at Leeds, 33 at London, 24 at Edinburgh and 17 at Glasgow.

† From INDIA, BURMA and CEYLON 1094, including 20 at Bristol, 175 at Cambridge, 335 at London, 45 at Manchester, 150 at Oxford, 137 at Edinburgh, 101 at Glasgow, 21 at St. Andrews.

From JAPAN 51, including 32 at London.

From BELGIUM 20, DENMARK 33, FRANCE 52, GREECE 37, HOLLAND 35, ITALY 12, NORWAY 32, SWEDEN 12, POLAND 21, PORTUGAL 14, ROUMANIA 38, RUSSIA 91, KINGDOM OF SERBS, CROATS and SLOVENES 23, SPAIN 32, SWITZERLAND 43.

From AUSTRALIA 160, including 38 at Cambridge, 26 at London, 53 at Oxford and 19 at Edinburgh.

From NEW ZEALAND, 90, including 23 at Cambridge, 25 at London, 17 at Oxford and 20 at Edinburgh.

\* Compiled from lists received from all Universities and University Colleges except the Medical Schools of St. Bartholomew's Hospital (72 students from overseas in 1921, including 9 from Foreign Countries) and Charing Cross Hospital (8 from overseas) in 1921, and Corpus Christi, Oxford. A consolidated list of names of the students has been printed, and can be obtained from the Universities Bureau.

† Lord Lytton's Committee estimated the total number of Indian students in the United Kingdom on Oct. 31, 1921, to be 1450. This includes, in addition to students at Univs. and Univ. Colleges, those studying at the Inns of Court and other institutions, in works and with private tutors.

## XXIII

## ADMISSION AS UNDERGRADUATES OF THE UNIVERSITIES OF THE UNITED KINGDOM OF PERSONS EDUCATED ABROAD

The following notes relate to the admission of students from other countries proposing to take full courses for a First degree, excluding from consideration those who seek admission with advanced standing on the ground of having already pursued courses in other Univs.\* and those who seek only to study without aiming at a degree.

A comparison of the regulations of the several Univs. of the U.K. governing admission of such students discloses a general agreement in principle, with divergencies in application.

The regulations are drafted on the understanding that the application to a student educated in another country of the ordinary entrance tests might be inappropriate owing to the fact that the tests exacted in the U.K. have been framed with reference to secondary education curricula, which may be somewhat different from those which obtain in the country from which the student comes, or to the student having reached a stage in his education at which the passing of ordinary entrance tests would involve a wasteful repetition of preparatory studies. They accordingly provide for the acceptance from such a student of other evidence of academic qualifications: ordinarily certifs. which would entitle to admission to a Univ. in the student's own country, together with such further evidence as may be necessary to ensure that no student shall be admitted to a course of study for a degree without a reasonable prospect of his being able to pursue it to graduation; in particular, if the student be one whose mother tongue is not English, evidence that he has a sufficient mastery of this language to enable him to follow courses of instruction conducted in English.

The lines along which this policy has been applied in the several Univs. may be briefly indicated as follows:

*Oxford and Cambridge* particularize the examns. conducted abroad, which they recognize to the extent of accepting pass certifs. as exempting from Responses or the Previous Examn. respectively. These are not, strictly speaking, Entrance Examns., because in Oxford and Cambridge matriculation follows without further examination upon admission to one of the Colleges, Halls, or Societies, which fix their own entrance conditions; in effect, however, they take the place of the Matriculation Examn. of other Univs.

Oxford includes in its list (see Appendix A) examns. held in France, Germany, Austria, Hungary, Switzerland, Russia, Serbia, Italy, Holland, and, subject to the condition that the student has passed in Latin or Greek and in one other approved foreign language, in Canada, Austral-

\* A résumé of Regulations regarding such concessions is given on p. 14.

asia, S. Africa and Hong-Kong. An *Adviser to Colonial and Foreign Students* is attached to the Univ. Registry.

Cambridge exempts from the several Parts of the Previous Examn. candidates who have passed, in the subjects prescribed for those Parts, certain examns. (see Appendix B) held in Australasia, S. Africa, and the continent of Europe.

Exemption may also be obtained, not only from Responsions (and the Examn. in Holy Scripture) or the Previous Examn., but also from the Entrance Examns. of the other Home Univs., by passing the Oxford or Cambridge Senior Local Examns., which are held in various parts of the British Empire overseas as well as in the U.K.

*London* accepts certifs. of matricn. of Colonial Univs., and (provided they indicate a standard *prima facie* involving an education equivalent in the student's own country to that required in England for matriculation in London) Indian or Foreign certifs., as grounds for exemption from the ordinary Matriculation Examn. of students of not less than 19 years of age, but requires all candidates so exempted, except those who have passed under prescribed conditions the Matricn. Examn. of Adelaide, Melbourne, or West Australia, to undergo in London a shortened form of this examn. under Statute 116 (see Appendix C). London also arranges for the holding of its own ordinary Matriculation Examn. in the Colonies and self-governing Dominions upon the application of the local Governments.

*Scottish Universities.* Candidates from the British Dominions or Colonies may be exempted from the Preliminary Examn. if they have passed examns. which would admit them to a course qualifying for graduation in Arts or Science in Univs. or Technical Colleges affiliated to a Univ. in the Dominion or Colony from which they come, provided (1) their knowledge of English is sufficient to enable them to follow the courses of instruction with profit; and (2) if candidates for degrees in Engineering, they have a knowledge of Mathematics of a certain specified standard. Those whose native language is other than English are required to pass an examn., oral and written, in this language, including set books. Students from India are subject to the further condition that they have passed the Intermediate Examn. in Arts or Science, as the case may be, in a recognized Indian Univ.

As regards students from foreign European countries, the B. ès L. and B. ès Sc. and similar "certifs. of Maturity or Grades, entitling the holder to enter upon a regular course of study in the Univs. of his own country" are accepted subject to the above-mentioned conditions as to knowledge of the English language. Certain Egyptian, Argentine and Chinese certifs. are also recognized. Provision is not made specifically for the acceptance of other foreign certifs., but the Board has a general dispensatory power in regard to applicants of not less than 21 years of age who satisfy it as to their fitness.

*N.B.*—In each Univ. the Senatus may for any particular class, attendance on which for a specified period is necessary in order to qualify for graduation, determine the conditions of admission to such qualifying attendance.



*The Northern (English) Universities Joint Board.* Subject to Special Regulations for Entrance to particular Faculties, exemption from the Matriculation Examn. is granted to a student who holds the Secondary Education Certif. of the Egyptian Ministry of Education, or has passed the First Examn. in Arts, Sc., or Med. of an approved Indian univ., and may, at the discretion of the Board, be granted to "applicants holding certs. of having passed examns. of a standard at least equal to" Oxford Responsions, Cambridge Previous, etc. The procedure at Liverpool is as follows: Applications, with references, from Foreign and Indian undergraduate students are receivable up to June 1, from Egyptian up to July 31. In respect of Indian and Egyptian undergraduate students the Students' Dept. of the High Commr. for India and the Egyptian Educational Mission are asked to certify as to the character, qualifications and suitability of applicants.

*Durham.* Foreign students may matriculate provided they satisfy a special Committee that they have passed in their own country an examn. of standard equivalent to the Durham Matriculation, and that they have sufficient knowledge of English to profit by the proposed course of study. The Matriculation Examn. of the Univ. of Sydney is recognized as exempting from that of Durham. Students in Codrington College, Barbados, and Fourah Bay College, Sierra Leone, may matriculate (and qualify for degrees) locally.

*Bristol.* A candidate educated elsewhere than in the U.K. may submit to the Senate evidence of having passed examns. elsewhere equal to the Matriculation Examn. of any Univ. of the U.K., or to any of the other examns. which qualify for matriculation at Bristol; if from an oriental country, he may submit evidence of previous education in his own country and of ability to follow instruction given in English. The Senate may thereupon, if satisfied with the evidence, declare him eligible for matriculation.

*Wales.* Candidates who have passed the Intermediate Examn. of an Indian Univ. and are certified by a Constituent College as possessing sufficient knowledge of English to profit by a degree scheme of study, are deemed to have passed an examn. equivalent to the Matricn. Examn.

*Belfast.* Matriculated students of Univs. outside the British Isles may send written statements and certs. which should, as a rule, cover all subjects required for matricn. in the Faculty concerned. When a cert. in any subject is not available, other evidence of proficiency may be furnished.

*Dublin* admits students who have passed the Matricn. Examn. of any Univ. in S. Africa including English, Mathematics, Latin, and one other approved language.

*National University of Ireland.* The Senior Public Examns. of Sydney, Melbourne, and Adelaide, the Jaffa Gymnasium Maturité, and the Matricn. Examns. of Sydney, Melbourne, and New Zealand, and of the Matricn. Board of S. Africa are recognized as qualifying for exemption from the Matricn. Examn. The Matricn. Examns. of other Univs. in the British Empire overseas (excluding India) are recognized only in combination with an Intermediate Examn. in Arts or Science.

## APPENDIX A

*Oxford Responsions.* Exemption may be granted to persons who have passed the Baccalauréat in France, the Maturitäts-Prüfung in Switzerland (Latin being one of the subjects in which they have passed), or at a Gymnasium in the German Empire, the Austro-Hungarian Empire, Russia, or Serbia, the Examn. for the Licenza Liceale in Italy, or the Eindexamen at a Gymnasium in Holland; also, provided they have satisfied the examiners in either Latin or Greek and in one other approved language (Greek, Latin, French, German, Italian, Spanish), to persons who have passed any of the following examns. :

- S. African Univs. Joint Matricn. Board (Distinction in 2 languages or in 1 language and Maths. or Nat. Sc.);
- Univ. of Adelaide Senior Public ;
- Univ. of Melbourne School-leaving (Class B) ;
- Univ. of W. Australia School-leaving ;
- New South Wales Educn. Department's Leaving Certif. ;
- New Zealand Matricn. or Entrance Scholarship ;
- Univ. of McGill Matricn., or First Year in B.A. course ;
- Ontario Educn. Department's Junior Matricn. ;
- Univ. of Toronto Senior Matricn., or First Year ;
- Univ. of Hong-Kong Senior Local ;
- Part I. of the Baccalauréat de l'Enseignement Secondaire in France.

## APPENDIX B

*Cambridge Previous Examn.* Exemption may be granted from the several Parts of the Examn. to a person who has (i.) passed the Matricn. Examn. of Adelaide, Melbourne, Sydney, New Zealand, or the Univ. of S. Africa; or (ii.) holds a certificate qualifying for admission without further examn. into the Univs. of Austria, Belgium, Denmark, France, Germany, Holland, Hungary, Italy, Norway, Russia, Spain, Sweden, or Switzerland, as follows :

(i.) From Part I. if he has passed in 2 languages other than English, one being Latin or Greek, provided that both have been taken on one and the same occasion ;

From Part II. if in either Mathematics or Physics or Chemistry ;

From Part III. if in English.

(ii.) From Part I. if he has passed (either in the Examn. in question or in another Univ. Examn. in the same country, certified by the authorities of the Univ. as ranking higher) in 2 languages other than his mother-tongue, of which one is Latin or Greek.

From Part II. if in either Mathematics or Science ;

From Part III. if in a Modern Language other than that used for exemption from Part I.

## APPENDIX C

*London.* The Examn. under Statute 116 held in London, usually about four times a year, comprises four subjects, of which English and either Mathematics or Logic are compulsory. Subjects outside the more usual field of elementary academic study may not be taken. Any certifs. that the candidate may present, or any examn. he may have passed, may be taken into account; but in every case he is required to undergo a *viva-voce* examn., and a sound elementary knowledge of English is necessary. Work for the Intermediate Examn. may be begun (*e.g.* in October) before passing the Matricn. test, this being deferred (*e.g.* until the following May just before the Intermediate).

## XXIV

INTER-UNIVERSITY SCHOLARSHIPS AND GRANTS  
FOR ADVANCED STUDY AND RESEARCH

Under the heading "SCHOLARSHIPS, ETC.," will be found in the sections of the Yearbook relating to the several Universities information regarding the extent to which they provide for the promotion of advanced Study and Research by the offer of Scholarships, Fellowships, etc., to their own graduate members. In this Appendix are given particulars of some other aids.

- (i.) Funds administered by Universities and Colleges.
- (ii.) Royal Commission for the Exhibition of 1851.
- (iii.) Beit Memorial Fellowships for Medical Research.
- (iv.) Beit Fellowships for Scientific Research.
- (v.) Gilchrist Educational Trust.
- (vi.) Funds administered by the Royal Society.
- (vii.) British Association for the Advancement of Science.
- (viii.) British School at Rome.
- (ix.) British School at Athens.
- (x.) Marine Biological Association.
- (xi.) Ramsay Memorial Fellowships.
- (xii.) Albert Kahn Travelling Fellowships.
- (xiii.) Cancer Research Funds.
- (xiv.) Engineering and Naval Architecture Scholarships.
- (xv.) Johnston Chemical Scholarship.
- (xvi.) Grocers' Company Sanitary Science Scholarship.
- (xvii.) Kitchener Scholarships.
- (xviii.) Imperial Order Daughters of the Empire Scholarships.
- (xix.) Travelling Scholarships for Journalists.
- (xx.) British Empire Exhibition (1924) Fellowships.
- (xxi.) Sir George Watson Chair of American History, etc.
- (xxii.) American University and College Scholarships.
- (xxiii.) Anglo-Swedish Society.
- (xxiv.) Federations of University Women.
- (xxv.) Government Grants and Co-ordinating Agencies.
- (xxvi.) Ministry of Agriculture and Fisheries.
- (xxvii.) Ministry of Health and Medical Research Council.
- (xxviii.) Research in the Colonies.
- (xxix.) Research in Canada, Australia, and S. Africa.
- (xxx.) Research in India.
- (xxxi.) Research in the U.S.A.
- (xxxii.) Research in France.
- (xxxiii.) International Foundations and Organizations for Research.

For *Rhodes Scholarships*, v. p. 175 ; for *Carnegie Trust* for the Univs. of Scotland, p. 223.

## (i.) FUNDS ADMINISTERED BY UNIVERSITIES AND COLLEGES

BIRMINGHAM : *Walter Myers*—v. p. 26.

CAMBRIDGE : *Almeric Paget Studentship*, £150, for Polit. Sc., Economics, etc., open to graduates of any Univ., or those about to graduate. Election after examn. (English Essay and questions on Polit. Hist. and Econ). Applications, with 3 testimonials, evidence as to graduation and signed statement of age and proposed course of study, receivable up to July. Student to come into residence at Corpus Christi Coll. for the academic year succeeding election.

*F. W. Mailland Memorial Fund*. Grants may be made to any person engaged in any research in the History of Law or of Legal Language or Institutions, or for delivery of lectures, publication of works, etc., connected with these subjects.

*Whewell Scholarships* in International Law, one of £100 and one of £50, open to all persons whether already members of the Univ. or not who are under 25, tenable for 2 yrs. in the Univ.

*J. L. Walker Studentship* in Pathological research, £300 p.a. for 3 yrs. Candidate need not necessarily be a member of the Univ.

*Balfour Studentship* in Biological research, especially in Animal Morphology, £300 p.a. for 3 yrs. ; student need not be a member of the Univ., but must study in it for at least 3 terms.

*Hort Memorial Fund*, £65 p.a., for grants to persons engaged in Biblical, Hellenistic, or Patristic research, or undertaking connected therewith.

*Gordon Wigan Fund*, £300 p.a., for scientific educn. or research.

*Worts Fund* for investigations in foreign countries respecting religion, laws, etc., or geographical discovery or antiquarian research therein.

*Clare College Research Studentships*, £125 p.a., not more than two at a time; graduate members of any Univ. may be elected, but preference to members of the College.

*Emmanuel College Research Studentship*.—Value £150 p.a., tenable for 2 yrs. Open to a graduate or other qualified student, not less than 21 yrs. of age, from another Univ. beginning Research at Cambridge (v. p. 52). Applications should reach the Master not later than Sept. 18, and should be supported by two certificates of character, brief account of career, with names of professors or teachers under whom applicant studied, precise statement of proposed course of research, and any evidence of general ability and of special fitness for proposed research.

*Peterhouse Research Studentship* (Abercrombie Smith), £150. Open to graduates of any British or Foreign Univ. Applications receivable by Tutor up to July.

*Trinity College Research Studentship and Dominion and Colonial Exhibitions*.—A Studentship of value (dependent on the student's pecuniary circumstances) not exceeding £200 p.a., tenable during preparation for the Ph.D. degree in the Univ. of Cambridge. Open to men who have graduated or are otherwise qualified, provided that they

have not commenced residence in the Univ. of Cambridge. Tenure is conditional on entry as Research student (minimum age, 21; v. p. 52) and upon diligence in the approved course. Applications with certificates of birth, graduation, and character, record of education, any evidence of aptitude for research, and full account of pecuniary circumstances, should reach the Senr. Tutor not later than July 25.

The *Exhibitions* for students residing in the Dominions and Colonies, annual value of £40, which may be increased by remission of College fees to £85 in cases of special need, are tenable for 2 yrs. and possibly for 3. Candidates must apply through the principal authority of the Univ. to which they belong. The Univ. authorities, if they think fit to forward an application, the candidate being in their opinion of marked ability and one of whom it may be confidently expected that he will profit by a further period of Univ. study, will send with it certificates of birth and character, record of scholastic career, confidential reports by professors, etc., having personal knowledge of his attainments, on his ability, industry, and fitness to profit by a course at Cambridge, and a statement of the means at his disposal. A selected candidate may enter as an ordinary or as a research student (v. p. 52).

*Girton College Research Fellowships*.—1. *Science*. £300 p.a. for 3 yrs. (renewable up to 6 yrs.) for research in Math., Physical and Nat. Sciences. 2. *Arts* (Pfeiffer Fellowship). £250 for 3 yrs. (renewable up to 6 yrs.) for research in Language and Lit., Moral and Polit. Sc., or History. Open to women who are graduates or have taken Honours in a final degree examn. of any Univ., and members of the Girton College Roll. The Fellow will reside at the College (charge for rooms and commons, £60 p.a.) or, with the special permission of the Council, elsewhere. Next award, 1924.

LEEDS: *Textile Research*—v. p. 76. LIVERPOOL: *Garrett International, Johnston Colonial, Lloyd's Register*—v. p. 87.

LONDON: *Dixon Fund for assisting Scientific Investigations*. Income available for grants—about £275. Applications receivable by the Principal between April 1 and May 15. Full information required as to nature and objects of research proposed, estimated amount required for it (detailed estimate to be given), any previous grant received for same object, what apparatus of permanent value will be needed. Names of two referees to be given. Instruments, specimens, etc., purchased out of grants to be returned to the Univ. Published results of researches to refer to the Fund, and 25 copies to be supplied to the Univ. Preference given to applicants who are graduates of the Univ. or who undertake to work in a Dept. or School of the Univ. or other Instn. connected therewith.

*Charles Graham Medical Research Fund*. A Scholarship in Pathology, value not exceeding £300 p.a. for 2 yrs., is awarded from time to time "to enable a young man to continue his pathological researches, and at the same time to secure his services to the School of Advanced Medical Studies connected with Univ. College Hospl. as a Teacher under the direction of the Prof. of Pathology." Applicants should give names of 3 referees, including a Teacher of the Univ. or College in which

he has conducted his studies in Pathology. The Scholar is required to undertake teaching as well as research work.

*Keddey Fletcher-Warr Studentships for Post-Graduate Research in Science.* Value £200 for 3 yrs., renewable. Open to men and women of European descent who are graduates of some British Univ. or have qualified for such graduation, but preference is given, other things being equal, to a graduate of London of small or no private means. Awardable from time to time as notified in the Public Press.

*Rogers Prize, £100*, offered from time to time, for an Essay on a *Medical or Surgical* subject, named and appointed by the Univ. Open to all whose names appear on the Medical Register of the U.K.

*Imperial College Scholarships tenable at American Universities.* Under a scheme established in 1920, 6 Scholarships of £300 each (in special cases £400) may be awarded for 1 year for courses of post-graduate study in American Univs. or Works. The fund will be exhausted at the close of the session 1922-23. V. also section (iv.).

MANCHESTER: *Chemistry, Economics, Engineering, etc.*, v. p. 155.

OXFORD: *Philip Walker Studentship for Research in Pathology.* £200 p.a. for from 1 to 5 yrs., not restricted to members of the Univ., open to women as well as men.

ROYAL COLLEGE OF PHYSICIANS, London: *Streatfield Scholarship, £250* for 3 yrs. for research in Medicine or Surgery.

SCOTTISH UNIVS., *Ferguson, M'Cunn, Shaw*, v. p. 223.

GLASGOW: *Stevenson Citizenship Fund, £20,000*, established 1921 to provide for instruction, study, inquiry, and research, and thereby to emphasize the compatibility of civic or local with national patriotism and of both with full and free international co-operation. Lecturer in 1922, Sir Henry Hadow.

MCGILL: v. p. 317. TORONTO: *Mickle Fellowship* (endowment \$25,000) awarded to a member of medical profession as reward for advancement of practical knowledge in med. art or science. Four of \$500 with free tuition for M.A. or Ph.D.; preference to graduates of Canadian Univs. outside Ontario. Eight of \$500 (tutorial fellowships) open to graduates of any Univ. V. also p. 359.

## (ii.) SCHOLARSHIPS AWARDED BY THE ROYAL COMMISSION FOR THE EXHIBITION OF 1851

I. *Science Research Scholarships offered to Overseas Universities*, to enable selected students who have already completed a full University course and given sufficient evidence of capacity for scientific investigations to devote themselves for 2 years to research work under conditions most likely to equip them for practical service in the scientific life of the Empire. Value, £250 p.a., with supplements in certain cases, tenable ordinarily for 2 yrs., renewable in exceptional cases for a third year, at any institution approved by the Commrs., but not, except in very special circumstances, in the Dominion in which the scholar has received his scientific education; open to British subjects of age

(except in very special circumstances) over 26 yrs. At present not less than 7 (Canada 3, Australia 2, S. Africa and N.Z. 1 each) are offered annually; recommendations receivable up to May 1 (Australia and N.Z. June 1) from the following Univs.: Alb., B.C., Dal., McG., Manit., Queen's (Ont.), Sask., Tor., and any of the Univs. of Australia, N.Z. and S. Africa. A Scholar is not permitted to hold any position of emolument likely to conflict with the devotion of his whole time to the objects of the Scholarship, nor to accept any additional emoluments without the previous consent of the Commrs. Recipients in 1922: J. M. Luck, Toronto; W. H. McCurdy, Dal.; D. F. Stedman, B.C.; Miss M. Bentivoglio, Syd.; J. S. Rogers, Melb.; J. C. Smith, N.Z.; I. Low, Stell.

II. *Senior Studentships*, at present 5 in number, each of £400 p.a. with supplements in certain cases, for 2 yrs. or, in special cases, for longer; open to British subjects of age not (except in very special circumstances) more than 30 yrs., on recommendation, receivable up to May 1, by Profs. and Heads of Depts. through the executive authorities of such Institutions as may be invited by the Commrs. to nominate; tenable at any Institn. at home or abroad approved by the Commrs. The Student is not permitted to undertake any work likely to conflict with the devotion of his whole time to the objects of the studentship, but a limited amount of time may, with the approval of the Commrs., be spent in delivering an advanced course of lectures. He is not debarred from holding another position of emolument, but in such cases the Commrs. may modify the value of the studentship. Recipients in 1922: C. E. Tilley (Geol.) and A. E. Ingham (Maths.), Camb.; J. E. Jones (Maths.), Manc.; J. S. Buck (Chem.), Liv.; G. T. R. Hill (Aeronautics), Lond. (Univ. Coll.).

III. *Post-graduate Scholarship in Naval Architecture*. £250 p.a. for 2 yrs. for research work (for which no emolument will be receivable) in problems connected with design and construction of ships and their machinery and in the development of the shipbuilding industry at home and abroad. Open to British subjects under 30 who have passed with marked distinction through a course of study and practical training in N.A. at, and been nominated by, the R.N. College, Greenwich, Univ. of Glas. or Liv., or Armstrong College. The nominations are reported on by the Council of the Inst. N.A. Recipient in 1922: W. G. A. Perring (R.N.C., Greenwich).

IV. *Industrial Bursaries* of not more than £150 p.a. for 1, 2, or, exceptionally, 3 yrs. to cover the period between leaving College and obtaining sufficiently remunerative employment in Industry. Open to British subjects under 25 recommended from one of the Univs. of Gt. Britain, including the Imperial Coll. of Sc. and Tech., Heriot-Watt Coll., or Univ. Coll., Nottingham. A candidate must have been a *bona fide* student of Science for a term of 3 yrs., should give evidence of practical ability likely to lead to his advancement in industrial work, and show that he has obtained, or can within 1 month of election obtain, an industrial post to be approved by the Commrs., and is in need of pecuniary assistance to enable him to hold such a post. Thirty-six bursaries awarded in 1922.



V. *Rome Scholarship in Architecture*, £250 p.a. for 3 yrs. Open to British subjects under 30 by competition conducted by the Faculty of Arch. of the School at Rome. A Student or Associate of the R.I.B.A. who is placed next in order of merit to the winner will be recommended for the Jarvis Studentship of £250 p.a., v. p. 503.

*Rome Scholarships in Sculpture and in Decorative Painting*, £250 p.a., tenable for 3 yrs. at the British School at Rome. Open to British subjects under 30 by competition conducted by the Faculties concerned. The Faculty of *Engraving* administers a Scholp. of the same value. Recipients in 1922: Archit., S. Welsh (Liverpool); Sculpture, (1) G. R. Hoff (Nottingham and R.C.A.), (2) J. A. Woodford (Nottingham and R.C.A.); Engraving, R. S. Austin (R.C.A.); Painting, —.

*General.* Women are eligible for all the Scholps. except III. and IV. Address of the Secy to the Commrs., 1 Lowther Gardens, Exhibition Rd., London, S.W.7. Entries for the Rome Scholps. are receivable up to Nov. 1 by the Hon. General Secy., British School at Rome (same address).

### (iii.) BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH

Founded in 1909 by Sir Otto Beit, K.C.M.G., in memory of his brother Alfred, "to promote the advancement by means of research of Medicine and the allied sciences in their relation to Medicine." Six, each of £350 p.a. and usually tenable for 3 yrs., with a possible extension of 1 yr. at £400, are awarded in July. Open to graduates, men or women, in any Faculty of a British Univ. Notice of each election is published 3 mos. in advance. Applications are considered by an Advisory Board. Senior Fellowships of £600 p.a. tenable for 3 yrs. may also be awarded to persons who have already held Junior Fellowships. Junior Fellows appointed in 1922: E. B. Verney, F. Cook, F.R.C.S., J. L. Rosedale, M.A. Ox., R. Hilton, B.A., M.B. Camb., A. Huggett, V. D. Allison, M.B. London. Special grants have been made from time to time for, or in aid of, particular objects of research. Address of Hon. Sec. to the Trust—Sir James K. Fowler, K.C.V.O., C.M.G., 35 Clarges St., Piccadilly, London, W.1.

### (iv.) BEIT FELLOWSHIPS FOR SCIENTIFIC RESEARCH

Founded by Sir Otto Beit, K.C.M.G., in 1913 to promote the advancement of Science by means of research. At present £250 p.a. for 1 yr. with possible maximum extension of 1 yr. Tenable at Imperial College of Sc. and Tech., London, under supervision of a Prof. Fellows are required to devote their whole time to their research and to hold no appointment, paid or unpaid, without sanction of the Trustees. Open to men or women under 25, of European descent by both parents, who have taken a degree in any Univ. in the British Empire, or Diploma or Associateship of any College approved by the Trustees. Not open to holders of any other Scholarship or Fellowship. Elections, advertised

3 mos. in advance, are made annually in July. Applications should give full information as to qualifications, previous career, general character of proposed research, whether applicant has private means sufficient to carry on the research for 2 yrs. without aid of Fellowship, names of not more than 3 referees including one on the staff of the Univ. or College or a College of the Univ. at which the degree, etc., was obtained. Testimonials should not be sent. Capacity for research, personal record, and importance of proposed research will be taken into consideration. Inquiries may be addressed to the Rector of the Imperial College. Fellows for 1922-23: H. L. Riley and H. W. Buston of R.C.Sc., and W. A. P. Challenor from Birmingham.

#### (v.) GILCHRIST EDUCATIONAL TRUST

Most of the Scholarships, etc., awarded by the Trust are for students of particular institutions. The following are not so restricted:

Scholarships in *Turkish* (1) and *Chinese* (1). £50 tenable at the School of Oriental Studies, London, or, in the case of a student of the School of 1 yr.'s standing, in an Oriental country. Open to candidates of European origin. Awarded on results of an examn. held in July in Grammar, History of the Language and its Relationships, 2 set books, unseen translation. Applications (in a prescribed form) receivable by the Director of the School up to May 15.

Several Scholarships of £30 tenable for 1 yr. in a *Training College for Women*. Open to graduates of a British or other recognized Univ.

Studentship tenable at the *British School at Rome*, £75 for 1 yr. At least 5 months to be spent in Rome. Open to men and women under 25 for a definite course of study for which Rome offers advantages and calculated to assist them in their profession. Applications with statement of previous training and proposed course, copies of not more than 3 recent testimonials based on personal acquaintance with candidate and his work, and any references, should reach the Secy. of the School, 19 Bloomsbury Sq., London, W.C.1, by Sept. 1.

Scholarship in *Economics and Home Science*. £50 tenable for 1 yr. at King's College for Women, London. Open to graduates of any approved Univ. or students who have successfully completed the 3 yrs.' course in these subjects. Evidence required of knowledge of not less than 2 of the following: Bact., Biol., Chem., Economics, Physics and Hygiene, Physiol., Psychol. Applications with account of educational career and not more than 3 recommendations should reach the Warden by June 8.

Studentship in *Geography*. £80 (in special cases, £100) for a definite course of advanced work extending in general over 9 mos., to be approved by the Trustees. No other work to be undertaken without written consent of the Trustees during the tenure of the Studentship. Open to Teachers of either sex who have had experience in teaching Geog. Applications, stating age, career, training in Geog., experience in teaching Geog., proposed work, time to be devoted to it, name of Headmaster, etc., to whom reference can be made, to reach Prof. Lyde, University College, Gower Street, London, W.C.1, by Feb. 28. The

student is required to sign a declaration of intention to continue to be a teacher of Geog. for 2 yrs. after expiry of the Studentship.

*Address of the Secy. to the Trustees*: 1 Plowden Buildings, Temple, London, E.C.4.

#### (vi.) FUNDS ADMINISTERED BY THE ROYAL SOCIETY

*Foulerton Research Fund.* (a) Research Professorship, the stipend being at least £1400 p.a. *Duties*: To conduct, in a place approved by the Committee, such original researches in medicine or the contributory sciences, on lines approved of by the Committee, as shall be calculated to promote the discovery of the causes of disease and the relief of human suffering. The Prof. shall devote the whole of his time to research. Tenable for 5 years in the first instance, the appointment being thereafter renewable for further periods of not more than 5 years at a time. (b) Research Studentship of £700 p.a., restricted to British subjects. *Duties*: To conduct researches in medicine or the contributory sciences, under the supervision and control of the Committee, to whom the student will be required to report from time to time on the progress of his work. Tenable for 3 years and renewable from year to year, with a maximal total tenure of 6 years from the first award. Incumbents: (a) E. H. Starling (v. p. 100), (b) H. W. C. Vines (v. p. 41).

*Mackinnon and Moseley Research Studentships.* Each of the value of £300 p.a. Tenable in the first instance for 2 years, but renewable in exceptional cases from year to year, total length of tenure not to exceed 5 years. *Mackinnon Studentship* for "furthering Nat. and Physical Sc., including Geol. and Astron., and . . . original research and investigation in Path." *Moseley Studentship* for "the furtherance of experimental research in Path., Physics, and Chem., or other branches of science, but not in Pure Maths., Astron., or any branch of science which aims merely at describing, cataloguing, or systematizing." Incumbents: L. T. Hogben, D.Sc., and H. Robinson.

*Sorby Research Fund* for original Scientific research. The income, about £600, is devoted to maintaining a Fellowship tenable ordinarily in the Univ. of Sheffield for 5 yrs., renewable for further periods. No permanent duties outside the research work may be undertaken. Appointments are made by a Committee composed of 4 persons appointed by the Council of the R.S. and 3 appointed by the authorities of the Univ. of Sheffield. The last appointment, 1921: N. K. Adam, M.A.

For all the above appointments applications are invited by public advertisement.

*Scientific Relief Fund* (income about £700 p.a.) to aid scientific men or their families requiring assistance.

*Minor Funds*: Tyndall Mining Research, income about £35 p.a., for a studentship; Gunning, about £30 p.a., triennial grant for research in Physical Science and Biology; Joule, about £50 p.a., biennial grant for research in branches of Physical Science connected with Joule's work; Lawrence, about £160 p.a., for research in Diseases in man and animals.

*Government Grants for Scientific Investigations.* The conditions are notified annually in time for applications to be received by Jan. 1. Only British subjects are eligible. Appropriations in 1921-22 numbered 96, the amounts ranging between £10 and £200.

*Medals.* Copley, for Philosophical research (any country); Rumford (biennial), for useful discovery in Light or Heat, in any part of Europe; Royal, for advancement of National Knowledge; Davy, for Discovery in Chemistry in Europe or Anglo-America; Darwin (with grant of £100, biennial) for work in Darwinian field; Buchanan (with money grant, quinquennial), for service to Hygienic Science or Practice; Sylvester (with money grant, triennial), for Mathematical Research; Hughes (with money grant), for discovery in Physical Sciences, particularly Electricity and Magnetism. The 4 last are open to foreigners as well as to British subjects.

*Address of the Society*—Burlington House, Piccadilly, London, W.1.

#### (vii.) BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Research Committees of the Association are constantly at work either conducting researches or preparing reports. Committees of the Sections concerned with different departments of Science consider *inter alia* the financing of proposed researches by such Research Committees. Address of the Assocn.—Burlington House, Piccadilly, London, W.1.

#### (viii.) BRITISH SCHOOL AT ROME STUDENTSHIPS

In addition to the scholarships mentioned above under (ii.) V. and (v.) a Studentship (Bernard Webb) worth not less than £250, tenable for one year, is offered for the encouragement of the historical and critical study of Architecture; open to students not over 32 years of age who have been members of the Archit. Assocn. for 4 years. The Pelham Studentship in Archæology (£100), awarded by the Univ. of Oxford, is open only to members of that Univ.

#### (ix.) BRITISH SCHOOL AT ATHENS STUDENTSHIP

A studentship of value £100 tenable for one year is placed at the disposal of the Univs. of Oxford and Cambridge alternately. All students admitted to the School are expected to spend at least 3 months in Greece and to be engaged on some research work. They can, on payment of a small rent, reside in the School *Hostel*, and are admitted to use of the library. They also obtain special facilities for working in Museums and in travelling. Students of the British School at Rome are *ipso facto* admitted as students at Athens. Address of the Secy., 19 Bloomsbury Sq., London, W.C.1.

## (x.) MARINE BIOLOGICAL ASSOCIATION

A number of research tables at the Plymouth Laboratory are provided free of cost on the nomination of Governors (among others the Univs. of Oxford and Cambridge) and Founders of the Marine Biological Asscn. of the United Kingdom. The Ray Lankester Fund provides for the payment of £100 to an Investigator to be appointed from time to time by the trustees on condition of his spending at least 5 months in carrying on researches at the Laboratory. For full particulars application should be made to the Director of the Laboratory, Citadel Hill, Plymouth.

## (xi.) RAMSAY MEMORIAL FELLOWSHIPS

The Trustees (Chairman, Sir Hugh Bell, Bt. ; Secy., Dr. Walter W. Seton, University College, Gower St., London, W.C.) award from time to time 3 Fellowships, value £300 a yr. for 2 yrs., for Chemical research. They can be held in any Univ. or other place in the U.K. possessed of the requisite facilities for research; also in exceptional circumstances in other parts of the British Empire, and, by special permission of the Trustees, elsewhere. One is limited to candidates nominated by the Univ. and the Royal Technical College, Glasgow. Fellowships are also provided in connexion with the undermentioned Dominion and Foreign countries. The value in each case is £300 a year, except that the American is £350 and the Japanese £460. Fellows for 1922-23: British—Wm. Davies, M.Sc. ; R. W. Lunt, Ph.D. ; A. E. Mitchell, Ph.D. ; J. A. Mair, B.Sc. (Glasgow). American—C. S. Piggot, Ph.D. Danish—K. Højendahl. Dutch—C. F. van Duin. Japanese—K. Matsuno. Norwegian—D. Nickelsen ; Milda Prytz. Swedish—A. W. Bernton, Phil. Lic. Swiss—R. E. Meyer. Canada, France, Greece, Italy, and Spain—vacant.

## (xii.) ALBERT KAHN TRAVELLING FELLOWSHIPS

Founded by M. Albert Kahn of Paris "to enable men of proved intellectual attainments to enjoy during one-yr. or more sufficient leisure and freedom from all professional pursuits or pre-occupations to enter into personal contact with men and countries they might otherwise never have known; to issue from the world of books and their narrow sphere of habitual interests into the broader world of various civilizations, and all such human interests, struggles, and endeavours as go to the making of general civilization." Value £660 (namely, £600 for travelling expenses and £60 for books and souvenirs), temporarily increased to £1000. Open to British subjects, men or women, who have graduated, or qualified for graduation, at a Univ. in the U.K. No age limit is imposed, but preference will probably be given, other things being equal, to persons between 25 and 35. Elections are made not later than May 31 each yr. on nominations made by any of the Vice-Chancellors of the Univs. in the U.K., or the President

of the Royal Society, or the President of the British Academy. *Address* of the Secy. to the Trustees (F. J. Port, LL.B.): University of London, South Kensington, S.W.7. Fellow for 1922-23: J. H. Nicholson, B.A. (Oxon), nominated by the V.-C. of the Univ. of Bristol.

#### (xiii.) CANCER RESEARCH FUNDS

The *Imperial Cancer Research Fund* (capital £116,000), which is under the direction of the R.C.P. London and the R.C.S. England, has research laboratories and publishes reports of researches. Lord Atholstan has promised the sum of £20,000 in 10 instalments for special researches to be carried out by it. Mr. and Mrs. G. F. Todman, of Sydney, have presented to it the sum of £4000 in memory of their daughter, the late Mildred Hope Buzacott. *Address*—8-11 Queen Square, London, W.C.1.

Lord Atholstan has also offered a prize of \$100,000 to the graduate or student of any recognized Univ. who, within 5 years from the date of his offer (1921), is the first to discover a medicinal treatment for the effective cure of cancer. The decision to be left to the R.C.P. London and the R.C.S. England.

Information as to Cancer Research at Middlesex Hospital, at Manchester, and at Aberdeen is given on pp. 140, 149, 228.

#### (xiv.) ENGINEERING AND NAVAL ARCHITECTURE

THE INSTITUTION OF NAVAL ARCHITECTS, 5 Adelphi Terrace, London, W.C.2, offer for 1923 scholarships tenable 3 years at Glasgow Univ., Armstrong College, Liverpool Univ., R.N. College, and City and Guilds (Engineering) College, London. In Naval Architecture, 5, value, £130, £150, £150, £100, and £75 p.a.; in Marine Engineering, £150 and £75 p.a. Open to British apprentices or students.

NORTON AND GREGORY LD., 1 and 2 Castle Lane, Westminster, London, S.W.1, offer scholarships in Engineering, one of £100 p.a. and one of £50 p.a., tenable for 3 years at any Univ. in the U.K. or British Dominions. Open to candidates domiciled in U.K. aged 17-19. Applications receivable up to Feb. 15.

#### (xv.) JOHNSTON CHEMICAL SCHOLARSHIP

Value £150 for 1 yr., awarded on the results of an examn. in Chem. with Crystallography or Mineralogy, and tenable at Armstrong College, involving at least 24 hours per week throughout the session. Open to B.Sc. of any British Univ. of not more than 3 yrs.' standing from graduation. Evidence of previous training and ability to conduct an original Chem. investigation is required. Awarded in 1922 to W. H. Linnell.

#### (xvi.) GROCERS' COMPANY'S SCHOLARSHIPS

Three, £300 each, for 1 yr., renewable for 1 or 2 yrs., for inquiry into Causation of Prevalent Disease or as to means of Prevention of Premature Death. Cost of apparatus, etc., will be defrayed up to £300 in

any one year. No other scholarship to be held or remunerative employment undertaken without sanction. Open to British subjects under 35. Applications in prescribed form receivable before April 1 by the Clerk, Grocers' Hall, Princes Street, London, E.C.2. Held in 1922 by M. B. R. Swann at Path. Laboratory, Cambridge; A. Robertson at London Sch. of Trop. Medicine.

#### (xvii.) KITCHENER SCHOLARSHIPS

For Study and Training. Maximum value in any year £200 for maintenance *plus* tuition fees and, in case of study abroad, approved travelling expenses. Maximum period, 6 yrs.; minimum age, 16. Open to sons of officers and men of H.M. Forces—as a rule, sons of deceased officers and men. Value and length of tenure will in each case be such as to enable successful candidates to undertake a complete course of advanced education at any Univ. or other approved institution. Scholarships are offered annually in Jan., conditions being advertised about the middle of the month. The number awarded in 1922 was 69.

Application for full information should be made to the Secy., Lord Kitchener National Memorial Fund, 34 Norfolk St., Strand, London, W.C.2.

#### (xviii.) IMPERIAL ORDER DAUGHTERS OF THE EMPIRE SCHOLARSHIPS

Undergraduate, 24, held in Canadian Univs. by sons and daughters of deceased or totally disabled soldiers and sailors. Graduate, 4, held in English Univs. (3 at Oxford, 1 at Camb.) in 1921–22. *Address of the Order*—Dominion Bank Chambers, 238 Bloor Street East, Toronto.

#### (xix.) TRAVELLING SCHOLARSHIPS FOR JOURNALISTS

The Empire Press Union are endeavouring to finance a scheme to enable young journalists of proved capacity to travel in the Empire Overseas.

#### (xx.) BRITISH EMPIRE EXHIBITION (1924) COMMERCIAL RESEARCH FELLOWSHIPS

These were awarded on the nominations of the Chambers of Commerce of London, Glasgow, Warrington, Norwich and Oldham. The value of each is not less than £500, and the subjects have reference to inter-imperial trade and the development of the potential resources of the Empire and their promotion by means of the Exhibition.

#### (xxi.) SIR GEORGE WATSON CHAIR OF AMERICAN HISTORY, LITERATURE AND INSTITUTIONS

Founded by Sir W. G. Watson, Bt., who presented £20,000 for the purpose on the occasion of the return of the Prince of Wales from his

American tour. Each yr.'s course will usually comprise about 6 lectures by an eminent authority, American or British. The courses will be given in the various British Univs. in rotation. A general Inaugural Lecture was given in London by the late Viscount Bryce, O.M., in July 1921. In April 1922 Dr. A. T. Hadley, ex-President of Yale, gave a course of 6 lectures at English Univs. on "Some Economic Problems of Democracy." In May and June 1923 Dr. Nicholas Murray Butler, President of Columbia Univ., N.Y., will give a course of 8 lectures on "Founders of the American Nation." The Foundation is administered by the Anglo-American Society, 1 Central Buildings, Westminster, London, S.W.1.

## (xxii.) AMERICAN UNIVERSITY AND COLLEGE SCHOLARSHIPS FOR BRITISH STUDENTS

*Rose Sidgwick Memorial Fellowship.* Established by Americans in memory of a member of the British Educational Mission which visited the U.S.A. in 1918, in recognition of her service in the cause of Anglo-American friendship. Administered by the American Assocn. of University Women. Value \$1000 (providing tuition and residence during term for 1 yr., and about \$400 in cash towards travelling expenses and incidental fees); tenable at any approved College or Univ. in the U.S.A. English friends of Rose Sidgwick have raised a fund to supplement the Fellowship by providing for outfit, etc., in case of need up to £30. Open to British women (preferably from 25 to 35 years of age) of graduate standing. Applications (with 6 copies of not more than 2 recent testimonials and 2 references) giving date of birth and information as to qualifications, experience, work proposed to be done during tenure of Fellowship, and any experience of speaking in public, should be sent before May 1 to the Secy., British Federation of Univ. Women, 92 Victoria St., London, S.W.1. The award is made on the nomination of the Committee on International Relations of the Federation.

**HARVARD UNIVERSITY.** The Divinity School offers for 1922-23 (Sept. 25 to June 21) two "Williams Fellowships" of \$800 each for advanced studies in *Theology*. They are open to candidates from Great Britain, France, Holland and Switzerland, as well as to Americans and Canadians. Should a fellowship be assigned to an applicant from one of the European countries an additional grant of \$200 will be made towards travelling expenses. Applicants must be not less than 22 nor more than 30 yrs. of age; must have a working knowledge of Greek, Latin, French, German and English; and must have already pursued theological studies with high distinction. Preference to candidates wishing to prepare themselves to teach one of the theological disciplines. Applications receivable up to March 1 by the Secy. of the School.

*Choate Memorial Fellowship*, \$1850, of the Harvard Club of New York City. Awarded on nomination of the Vice-Chancellor of Cambridge to a British subject coming from Camb. to study in any department of Harvard Univ.



Dr. H. Cushing of Harvard in 1922 accepted the Mickle Fellowship awarded by the Faculty of Medicine of the Univ. of Toronto, but proposed to make over the income to a young Toronto graduate who was to be sent to Harvard to work with him.

**BYRN MAWR COLLEGE SCHOLARSHIPS FOR WOMEN.**—Three of \$720 (covering fees for tuition and, during term only, board and residence during one academic year). Open to English, Scottish and Irish women qualified for graduate study. Three similar scholarships for Frenchwomen and three for women of certain other nationalities. Applications receivable up to May 1. Further particulars obtainable from American Univ. Union, 50 Russell Sq., London, W.C.1.

**UNION THEOLOGICAL SEMINARY, N.Y. CITY.**—Fellowship in Theol., \$1200 for 1922–23, for advanced graduate work. Open to theol. students of high grade in England or Wales of any ecclesiastical communion who have completed a regular theol. course. Applications receivable by the Rev. the Principal, Mansfield College, Oxford.

**PRINCETON.** Jane Eliza Procter Visiting Fellowships. Three of \$2000 each annually, for 2 British scholars (to be nominated by the Univs. of Oxford and Cambridge) and 1 French, tenable for one year, with possibility of renewal, in Princeton Graduate College, for independent advanced study and investigation in purely liberal arts and sciences, exclusive of professional, technical or commercial subjects; open only to men holding a degree in distinctly liberal studies and of reasonably good health, high character, and exceptional scholarly power. Nominated in 1922: B. K. Martin (Camb.) and C. R. S. Harris (Ox.).

**YALE.**—Auchinloss and Dawson Scholarship, \$2000, offered for 1922–23, open to undergraduate or B.A. in residence at Cambridge.

Many American Universities having "Graduate Colleges" offer Research Scholarships and Fellowships of from \$300 to \$2000 p.a. which are ordinarily open to Foreign as well as to American students. Nearly all the American Univs. other than State Univs., and a few of the latter, offer each year fellowships of from \$200 to \$800 which are open to Foreign students. Most American Univs. close their scholarship lists about March 1.

A tentative plan for the establishment of fellowships for British subjects in American Univs. has been formulated by President Frank Aydelotte of Swarthmore College, American Secretary of the Rhodes Scholarship Trust. The plan has been submitted to several influential bodies and has been approved by the Executive Committee of the American Council on Education.

#### (xxiii.) ANGLO-SWEDISH SOCIETY

Two Travelling Scholarships of £50 each offered to qualified British students of either sex residing in the British Isles, to enable them to visit Sweden and there carry out a definite course of study and research. *Address*—10 Staple Inn, High Holborn, London, W.C.1.

Held in 1922 by W. N. Edwards, B.A. Camb., and Miss Joan Evans, B.Litt. Ox. The Scholarship will not be offered in 1923.

#### (xxiv.) INTERNATIONAL FELLOWSHIPS, ETC., OF FEDERATIONS OF UNIVERSITY WOMEN

The British Federation offers £100 to assist the holder to carry on during the Academic year 1923-24 research in Arts. Open to all members of Assocns. or Federations of Univ. women forming branches of the International Federation. Applications receivable by the Secy. of the National Assocn. or Federation of Univ. Women to which the candidate belongs up to Feb. 20, 1923. Address of the British Federation—92 Victoria St., S.W.1.

The American Assocn. offers \$1000 to enable the holder to carry on a year's research in some country other than her own during 1923-24. Applications receivable up to Feb. 1, 1923. Address—Prof. Margaret E. Maltby, Barnard College, Columbia Univ., N.Y.

The Canadian Federation has founded a Scholarship enabling a woman graduate of a Canadian Univ. to study at a Univ. of any other country represented in the International Federation.

#### (xxv.) GOVERNMENT GRANTS AND CO-ORDINATING AGENCIES

The estimates for 1922-23 provided under the head "Scientific Investigation, etc.," £198,000, of which £130,000 was for the Medical Research Council—v. *infra* (xxvii.), £36,500 for the National Museum and Library of Wales, £8750 for the Imperial Mineral Resources Bureau, £9000 for the Royal Society—v. *supra* (vi.), £3000 for the Solar Physics Observatory, £3000 for the Edinburgh Observatory, and smaller sums for 10 other bodies.

The Mineral Resources Bureau (2 Queen Anne's Gate Buildings, London, S.W.1) undertakes, in addition to collecting, compiling and disseminating information, to advise on the development of mineral resources.

The total expenditure during the year 1921-22 of the DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH was £525,585. This included Headquarters Administration, £37,561, Co-ordinating Boards and Committees, £21,464, Grants to Industrial Research Assocns., £86,355, Fuel Research Board, £46,616, Geological Museum and Survey, £57,423, National Physical Laboratory, £190,024, other grants for investigation and research, £86,141.

Grants to individual research workers (£50,000) are made on recommendations by individual professors. Notes on the conditions under which such grants are made were republished by the Dept. in 1922, price 2d., and the Annual Report of the Dept. for 1921-22 contains an explanation of the principles determining these conditions and an account of the working of the system (Cmd. 1735, price 3s.). During

1921-22 the Dept. made 205 allowances to students for training in research in Univs. and Colleges; 55 grants to research workers to undertake independent research or act as scientific assistants to investigators of standing; 20 grants to scientific workers to enable them to employ laboratory or clerical assistants or to purchase equipment. The system is intended to supplement and not in any way to supersede existing provision, national or local, for post-graduate research.

Up to August 1922 the number of *Industrial Research Associations* licensed by the Dept. was 24.

*Developments in the organization of research* in the Overseas Dominions are described in an Appendix to the above-mentioned Report.

## (xxvi.) MINISTRY OF AGRICULTURE AND FISHERIES

GRANTS FOR AGRICULTURAL (AND VETERINARY) RESEARCH. For some few years past the Ministry has awarded annually Research Scholarships (£200 p.a. for 3 yrs.) to assist promising students—usually honours graduates in Science of a British Univ.—to qualify as research workers. In 1922, 5 were awarded to students of Reading (2), Aberystwyth (2), and Edinburgh. In 1921 the Ministry instituted Travelling Research Scholarships for members of staffs of aided research institutions. In 1922, 2 were awarded to members of the staffs at Cambridge and Bangor.

The Ministry have allocated (with a view to the concentration at one institution or at institutions working in combination, of the scientific work in each of certain definite groups of subjects) grants-in-aid for the maintenance of research departments of institutions as follows: *Agr. Zoology*—London School of Tropical Medicine; *Fruit-growing*—Bristol Univ., East Malling Research Station (near Maidstone); *Animal Nutrition and Plant-breeding*—Cambridge Univ.; *Plant Physiology*—Imperial College of Science; *Economics of Agr.*—Oxford Univ.; *Dairying*—Univ. College, Reading; *Plant Nutrition and Soil Problems and Plant Pathology*—Rothamsted Experimental Station, Harpenden, Herts; *Crop Improvement and Seed and Potato Testing*—Nat. Inst. of Agr. Botany, Cambridge; *Animal Pathology*—Royal Vet. College, Camden Town, London, N.W.1, and the Ministry's Vet. Laboratory, Addlestone, Weybridge. Grants are also made for research in Plant-breeding to Univ. College, Aberystwyth, Animal-breeding (poultry and rabbits) to Cambridge, Bee-culture to Rothamsted Exptl. Station, Glasshouse culture to Waltham Cross Research Station, Silver-leaf disease research to Camb. Univ., Testing new varieties of fruit trees to Royal Hortic. Soc.

A grant has also been made to enable the Agr. Depts. of the following institutions to supplement in cases calling for special scientific knowledge and training the advice usually given by members of the county Agr. Staffs: Armstrong Coll., Bristol, Cambridge, Leeds and Manchester Univs., Aberystwyth, Bangor, Cardiff, and Reading Univ. Colleges, Midland, S. Eastern (Wye), Harper-Adams, and Seale-Hayne Agr. Colleges.

Special research grants amounting in the aggregate to £3860 for work in 1922-23 were made to Cambridge and Bristol Univs., the Imperial College of Science, the Nat. Inst. of Agr. Botany, the Waltham Cross Research Station, Aberystwyth, Armstrong, S. Eastern Agr. (Wye), and Bangor Colleges, and the East Anglian Institute.

In a leaflet (197) issued by the Ministry in Sept. 1920 (revised Sept. 1922) information is given regarding some of the above-mentioned grants and generally regarding Agr. Education and Research in England and Wales. V. also p. 501.

**FISHERY RESEARCH.** Researches likely to lead to results bearing on the development and improvement of fisheries are eligible for advances from the Development Fund as follows: 1. *Grants-in-aid of the general work of Independent Marine Institutions*, to aid fundamental researches forming part of the Institution's continuous programme of work. Departments of a Univ. engaged principally upon education which may be eligible for grants administered by the Univ. Grants Committee are not as a rule eligible for these. Applications in prescribed form are receivable by H.M. Treasury up to Sept. 30 for grants to be made in the ensuing financial year. They will be referred to the Ministry for report, and may involve informal inspections by representatives of that Dept. and of the Development Commission.

2. *Grants for Specific Researches.* (a) Directed to definite economic ends of use to the Fishing Industry; or (b) "Free" researches. Communications with a view to grants under head (a) should be addressed to the Secretary to the Ministry. As regards grants to Instns. under head (b), the work may be carried on either by members of the staff or by workers temporarily attached to the Instn. or by research students working under the guidance of members of the staff, whose qualifications are approved and who are definitely recommended by the Head of the Instn. The Development Commrs. will also be prepared to consider applications for additional grants for temporary assistants and for apparatus, etc., to enable members of the staff to prosecute special lines of inquiry. Applications should be addressed to H.M. Treasury and will be dealt with in the same way as those under par. 1. In special cases applications for grants under either (a) or (b) in respect of researches by workers not attached to any recognized Instn. may be considered.

The amount provided in the Ministry's estimates for 1922-23 for grants under 2 (a) was £1400.

#### (xxvii.) MINISTRY OF HEALTH AND MEDICAL RESEARCH COUNCIL

*School of Hygiene (Rockefeller Foundation).* The Post-graduate Medical Committee, over which the Earl of Athlone presided, reported in May 1921, and recommended, *inter alia*, that a School should be established in London at which further facilities would be provided for the education of the medical practitioner and for research in preventive medicine. On Feb. 23, 1922, the Minister of Health announced that the Rockefeller Foundation had expressed their willingness to

provide a sum not exceeding two million dollars towards the cost of the establishment and equipment of a School of Hygiene for these purposes, on the understanding that the Government accepted responsibility for the cost of the staff and maintenance of the School, and that he had been authorized to accept the Foundation's offer. A Committee was subsequently appointed by the Minister, under the Chairmanship of Sir Arthur Robinson, First Secretary of the Department, to consider the preliminary steps to be taken in regard to the site and planning of the School. A site for the School has been acquired in Bloomsbury and negotiations have been entered into with the London School of Tropical Medicine, and it is hoped that this School, while retaining its identity, will become part of the School of Hygiene.

Grants are made to individual research workers in respect of specific investigations approved by the Council. They may be made for the whole-time or part-time personal remuneration of the worker or of his scientific assistants, or for the payment of the special expenses of the work, the two kinds of grant being rigidly distinguished. Applications should be addressed to the Secretary, Medical Research Council, York Buildings, Adelphi, London, W.C.2.

#### (xxviii.) RESEARCH IN THE COLONIES

A Committee, appointed in Nov. 1920 by Lord Milner, then Secy. of State for the Colonies, to consider what steps could be taken to secure the assistance of the Univs. in carrying out research work for the Colonies and Protectorates, reported (Cmd. 1472, price 2d.) in April 1921 that there should be such substantial augmentation of scientific workers in our Univs. as will not only foster research among students but also enlarge the corps of scientific experts to whom the Empire may turn for help in the hour of need. They drew attention to the large number of appointments which the Colonial scientific departments offer to men adequately equipped for them (Agric. 254, Forestry 106, Analytical Chemists 18, Vet. 77, Geol. 20, Med. 649) and recommended that for appointments requiring research qualifications selection should be not by competitive examination but based on recommendations by Universities or Colleges. Among organizations other than the Univs. the resources of which are available for assisting in the research work in question are the Imperial Bureaux of Entomology and Mycology, the Tropical Diseases Bureau, the Tropical Diseases Research Fund Committee and the Advisory Medical and Sanitary Committee for Tropical Africa.

The West Indian Agricultural College is described on p. 366.

#### (xxix.) RESEARCH IN CANADA, AUSTRALIA, AND S. AFRICA

CANADA. An Honorary Advisory Council for Scientific and Industrial Research was constituted in Nov. 1916 under a sub-committee of the Privy Council of Canada which had been formed in the same year to have charge of all measures to foster the scientific development of

Canadian Industries. It consists of 11 members chosen from the Univs., the Engineering Profession and the Industries of the Dominion. With the help of Associate Committees comprising over 100 of the leaders of science and industry it has undertaken or promoted important researches in regard to the utilization of peat and of low-grade lignites, methods of re-forestation, Canadian iron ores, action of alkaline waters on concrete, rust in wheat, and some 30 other subjects. By the foundation of *Bursaries, Fellowships and Studentships* tenable in Canadian Univs. provision is made each year for the training of young graduates in the methods of scientific investigation. On Feb. 20, 1922, the Administrative Chairman presented a report including, in addition to a general account of the work of the Council, special notes on overlapping and duplication of effort in scientific and technical work, and on proposals for a *National Research Institute*, for which the Government has made a special grant of \$100,000. The number of bursaries, etc., awarded in 1921-22 was 45.

AUSTRALIA. A National Research Council began its first session in Aug. 1921. A Commonwealth Institute of Science and Industry, including Bureaux of Agriculture and Industries, has been formed, which co-operates with existing State organizations in the co-ordination of research, training of investigators, etc. Among these are a Scientific Test House and a Stock Diseases Investigation Bureau, established by the N.S. Wales Govt., and a Forest Products Laboratory at Perth. An Engineering Standards Assocn. is projected. Provision has been made for establishment of Industrial Research studentships and fellowships.

NEW ZEALAND. The Cawthron Institute of Scientific Research at Nelson concerns itself specially with agriculture and fruit-growing.

S. AFRICA. The Research Grant Board of the Union of S. Africa, created in 1918 as part of the subsidiary organization of the Advisory Board of Industry and Science, considers questions of detail by which the spirit of research may be fostered amongst students and members of the staffs of Univs., Research Laboratories and Museums. It has provided (a) Grants of from £25 to £200 in aid of Research by members of the staffs of Univs., etc., awarded in the main to persons who have carried out previous research; (b) Research Scholarships of £80 to £130 p.a. for students at Univs., etc., who have taken their B.Sc. degree and show an aptitude for research, administered under the supervision of heads of Departments of Institutions; (c) Scholarships (temporarily suspended) for study of Commerce and Industries Overseas, £250 p.a., of which 4 were awarded in 1920.

None of these are restricted to any particular number. They depend on the number of suitable applications and recommendations.

### (xxx.) RESEARCH IN INDIA

Under the new Constitution the development of industries is a Provincial transferred subject and the Government policy in regard to research work is to a large extent determined provincially. The Imperial Department of Industries, however, maintains a record of

research work, disseminates information and makes provision for the conduct of researches for which the resources of any one province would be inadequate. An account of the Indian Institute of Science is given on p. 482; there are Research Institutes at Pusa (Agric.), Dehra Dun (Forestry) and Cawnpore (leather, vegetable oils and tinctorial chem. etc.); at Muktesar Bacteriological Lab. some research in animal diseases is done; an Indian Lac Assocn. has been formed (financed by a cess on exports); projects are in hand for a School of Mines and Geology at Dhanbad, an all-India Cotton Technological Institute at Bombay, and a Forest Research Institute in Burma. The Indian Research Fund Association, founded in 1911, receives a Govt. subsidy of Rs. 5 lakhs. It has organized research in leprosy, hook-worm, malaria, lathyrism, and other diseases, and published the results in the *Indian Journal of Medical Research*. It has elaborated, with the help of Prof. Starling of London, a scheme for an IMPERIAL MEDICAL RESEARCH INSTITUTE AT DELHI, and this scheme has received the approval of the Indian Legislature. An institute of Clinical Medicine is to be attached to the Institute proper.

#### (xxxi.) RESEARCH IN THE UNITED STATES

The NATIONAL RESEARCH COUNCIL of the U.S.A., an organization supported during the war largely by the Government but now entirely by private bodies and firms, has lately published an inventory (Bulletin No. 9, March 1921, \$1, obtainable from the Council Office, 1701 Massachusetts Avenue, Washington, D.C.) of funds, other than Federal and State Funds, available in 1920 for the encouragement of Scientific Research. It gives particulars of 529 University and College Funds of which the aggregate annual value was 2½ million dollars and of 170 other Funds worth over 18 million dollars per annum. Rockefeller and Carnegie benefactions alone provide over 17 million dollars p.a.

The AMERICAN COUNCIL OF LEARNED SOCIETIES, 419 West 117th Street, New York, represents organized scholarship in the humanistic fields of study.

The UNIVERSITY CENTRE FOR RESEARCH IN WASHINGTON, constituted in 1921, is maintained by a voluntary association of scholars, to promote and facilitate research in archives, libraries and other collections located in the District of Columbia, on the part of students in the graduate departments of American and Foreign Univs. and of others. Technical Divisions of History, Polit. Sc., Internat. Law and Diplomacy, Economics, and Statistics have been established. Students in foreign Univs. and other investigators desiring to avail themselves of its services should apply to the Director of the American Council on Education, 24-26 Jackson Place, Washington, D.C.

#### (xxxii.) RESEARCH IN FRANCE

*Les Ressources du travail intellectuel en France*, by MM. Tassy and Lérés (Gauthier Villars, 1921) contains lists of "Encouragements et

Aides Financiers." The annual value of prizes distributed in France by the national academies and by societies dependent on private initiative is stated to exceed 1,500,000 francs, and an almost equal amount is said to be devoted to subventions to missions, travelling fellowships and other aids to research.

### (xxxiii.) INTERNATIONAL FOUNDATIONS AND ORGANIZATIONS FOR RESEARCH

FONDATION UNIVERSITAIRE, 11 rue d'Egmont, Brussels, founded in 1920 with a capital of 55 million francs derived from the unexpended balance of the funds of the Commission for Relief in Belgium, aims (1) at helping impecunious young Belgians to take courses in Institutions for higher education and (2) at developing scientific production in Belgium. It makes loans for the first purpose and grants and subsidies for the second. In the year 1921-22 its loans for University study amounted to 844,500 francs, its subsidies to 617,280 francs. The subsidies included grants for study in Brazil 21,208 fr., in European Univs. 28,000 fr., for training in Scientific Research 86,416 fr., for research workers 128,589 fr., to periodical publications 332,903 fr. Grants for study in American Universities were made to 34 Belgian graduates and grants for study in Belgian Universities were made to 24 Americans. The Foundation arranges exchange visits of Professors. A club-house was established at 11 rue d'Egmont in 1922 for Belgian Univ. Professors.

AMERICAN-SCANDINAVIAN FOUNDATION. Travelling Fellowships of \$1000 each for travel and study by American graduates in Scandinavian Univs. and *vice versa*, 20 for America, 5 for Denmark, 10 for Sweden, and 5 for Norway. Address—25 West 45th Street, New York City. Applications receivable up to March 15.

FRANCO-AMERICAN SCHOLARSHIP EXCHANGE. Administered by the American Council on Education, 24-26 Jackson Place, Washington, D.C. Fellowships for American graduates in French Univs. (Free tuition, 16; free tuition plus maintenance, 4; 5000 fr., 2). About 28 scholarships for American women in French Lycées and Écoles Normales: board, room, and tuition and 30 p.c. discount on passage each way. About 50 scholarships for French women in American Colleges.

AMERICAN FIELD SERVICE FELLOWSHIPS FOR FRENCH UNIVERSITIES. For 1923-24 not more than 15 were to be awarded, value \$200 plus 8000 fr., tenable for one year, renewable for a second year in certain circumstances. Open to American graduates. Secretary—Dr. I. L. Kandel, 522 Fifth Avenue, New York.

NOBEL PRIZES, founded by Alfred Nobel who died in 1896, awarded for contributions to the common good by workers in (a) Physics, (b) Chemistry, (c) Medicine or Physiology, (d) Literature, (e) the Preservation of Peace. The prizes, worth from Kr. 120,000 to Kr. 150,000 each, are awarded for (a) and (b) by the Swedish Academy of Science, for (c) by the Stockholm Faculty of Medicine, for (d) by the Swedish Academy of Literature, and for (e) by a committee elected by the Norwegian Storting. Among the categories of persons qualified for



candidature for prize (e) are University Professors of Political Science and Law, of History, and of Philosophy. Particulars can be obtained from Nobelstiftelsens Styrelse, Norlandsgatan 6, Stockholm, Sweden. Awards in 1922 : (a) A. Einstein, N. Bohr ; (b) F. Soddy, F. W. Aston ; (d) J. Benavente ; (e) F. Nansen. The list of recipients of prizes in previous years includes the following names which have a special interest for English-speaking students : (a) 1904, Lord Rayleigh ; 1906, J. J. Thomson ; 1907, A. A. Michelson ; 1915, W. H. Bragg and W. L. Bragg ; 1917, Ch. G. Barkla ; (b) 1904, Sir Wm. Ramsay ; 1908, E. Rutherford ; 1914, T. W. Richards ; (c) 1902, Sir Ronald Ross ; 1912, Alexis Carrel ; (d) 1907, Rudyard Kipling ; 1913, Rabindranath Tagore ; (e) 1903, Sir W. R. Cremer ; 1906, Theodore Roosevelt ; 1912, Elihu Root ; 1919, W. Wilson.

FONDATION GEORGE MONTEFIORE offers triennially a prize of the value of 21,000 francs " au meilleur travail original présenté sur l'avancement scientifique et sur les progrès dans les applications techniques de l'électricité dans tous les domaines, à l'exclusion des ouvrages de vulgarisation ou de simple compilation." Work should be received by April 30, 1923, by M. le Secrétaire-archiviste de la Fondation George Montefiore à l'hôtel de l'Association, rue Saint-Gilles, 31, Liège (Belgique).

VISSER INTERNATIONAL LAW PRIZE (triennial). Administered by Leyden Univ. 5000 guilders. Subject for next competition (closing July 1, 1923), " International Treaties of the Republic of the United Provinces, 1579-1795." Language to be used—French or Dutch.

KRISTIANIA LAW PRIZE. V. p. 608.

TRAVERS-BORGSTROEM FOUNDATION. V. p. 616—Berne.

INTERNATIONAL RESEARCH COUNCIL, Palais des Académies, Brussels. General Secretary—Sir Arthur Schuster, Royal Society, Burlington House. This body has been constituted with effect from Jan. 1, 1920, in pursuance of a resolution adopted in Nov. 1918 at a Conference in Paris at which the principal Allied Academies were represented. Under the auspices of the Council, *International Unions* have been formed for Astronomy, Geodesy and Geophysics, Pure and Applied Chemistry, Mathematics, Physics, and Radio-Telegraphy. Provisional statutes have been drawn up for similar Unions in Biological Sciences, Medical Sciences, and Geography.

UNION ACADÉMIQUE INTERNATIONALE for co-operation in the advancement of studies by means of collective researches and publications in the fields of Archæology, History, Philology, and Moral, Political and Social Science. The Union was constituted in 1919 on the initiative of the Académie des Inscriptions et Belles-Lettres. Its address is Palais des Académies, Bruxelles. The 4th annual session will be held there on April 16, 1923, and 2 following days, when work in progress (corpus of antique vases, catalogue of alchemical MSS., Edition of Grotius' works, customary law of Indonesia, etc.) will be reviewed, and projects for other work will be considered.

## XXV

## NOTES ON FOREIGN UNIVERSITIES

A NATIONAL UNION OF STUDENTS of the Univs. and Univ. Colleges of England and Wales was formed in Feb. 1922 "to represent the students of this country nationally and internationally," and to promote their educational and social interests in entire independence of all political or religious propaganda. They are affiliated to the *Confédération Internationale des Étudiants*. They maintain correspondence with students' unions in foreign countries, and have been specially active in promoting foreign travel of English students and their intercourse with students abroad. *Address*—The University Union, Malet Street, London, W.C.1. V. also p. 224, "International Academic Committee" of Scottish students.

AN INTERNATIONAL FEDERATION OF UNIVERSITY WOMEN was founded in 1920 "to promote understanding and friendship between the university women of the nations of the world, and thereby to further their interests and develop between their countries sympathy and mutual helpfulness." *Address*—92 Victoria St., London, S.W.1. International Club-houses: in New York—Women's Univ. Club, 106 East 52nd St., and Smith College Club, 133 East 17th St.; Washington, D.C.—American Asscn. of Univ. Women, 1634 1st St.; Brussels—Maison des Étudiantes, Chaussée de Warre, 212; Paris—American Univ. Women's club, 4 rue de Chevreuse (VI<sup>e</sup>); London—The Women's Institute, 92 Victoria St., S.W.1. As regards International Fellowships, etc., of the constituent Federations, v. Appendix XXIV. (xxiv.).

A UNIVERSITIES COMMITTEE, under the auspices of the Imperial War Relief Fund, was created in July 1920 on the initiative of Lord Robert Cecil. The aim of this Committee has been to relieve professors, men of letters and science, and students, attached to the Universities of Central Europe and Russia, by the collection and distribution of books, scientific periodicals, food, and clothing. These gifts are administered in part through the European Student Relief Committee of the World Student Christian Federation and in part through Dr. Nansen's organization. The British share of such gifts amounted in the two years 1920–22 to some £64,000. *Address*—General Buildings, Aldwych, London, W.C.2.

## AUSTRIA

The principal institutions for higher education are the Univs. of VIENNA, GRAZ, and INNSBRUCK, the College of Catholic Theology at

Salzburg, Faculty of Evangelical Theology at Vienna, Polytechnics at Graz and Vienna, School of Mines at Léoben, Schools of Agric. and Vet. Med., Academy of Fine Arts, College of Music, and School of Oriental Languages at Vienna. A report on the condition of intellectual life in Austria, prepared in August 1922 by Prof. de Reynold of the Univ. of Berne for the League of Nations (Committee on Intellectual Co-operation), was circulated in Nov. to Univs. and learned societies in all countries with an appeal to save Austria "from the fate of seeing its higher education and learning disappear from sheer want," and suggested, among other means, utilising the Arbeitsmittelbeschaffungsanstalt, associated with the Univ. of Vienna Zentralrat der geistigen arbeitenden, for the supply of books, periodicals, and instruments.

## VIENNA

*Rektor* (1922-23): Dr. Karl Diener. *Deans of Faculties* and numbers of professors and regular students: Theol.—Dr. Josef Lehner, 10, 152; Law—Hofr. Dr. Moriz Wlassak, 23 (and 42 Privat Doz.), 3188; Medicine—Dr. A. Fischel, 77 (and 214 Pr. Doz.), 3837; Philos.—Dr. Hermann Junker, 77 (and 119 Pr. Doz. and 21 Lekt.), 2845. Lecturer in English—T. W. MacCallum, viii., Lammgasse, 5.

A special leaflet for foreign students is published, and can be obtained (postage should be prepaid) from the Rektor or the Students' Bureau, Burgring, 9, Vienna i.

An "International Summer School" was held in 1922 (Sept. 7-21). Information regarding the post-graduate medical courses can be obtained from the Kursorganisation der Wiener medizinischen Fakultät, Vienna ix./1, Porzellang, 22 (postage should be prepaid). There is an Asscn. of American Physicians with headquarters at Spitalgasse, Cafe Klinik.

## GRAZ: KARL-FRANZENS-UNIVERSITÄT

*Rektor*: Dr. Anton Michelitsch. *Deans of Faculties* and numbers of students: Theol.—Dr. Gutjahr, 140; Law—Dr. G. Hanausek, 666; Medicine—Dr. H. Rabl, 1226; Philos.—Dr. K. Hillebrand, 584. Prof. of English Philol.—Albert Eichler.

Vacation course for medical practitioners planned for 1923. Extension lectures in the winter on literary and scientific subjects. There is a "Studentische Hilfsausschutz," which arranges exchanges of graduate students.

## BELGIUM

Of the four Universities Gand and Liège are State institutions administered under the control of the Ministère des Sciences et des Arts, which also controls the secondary schools. In order to qualify for the State degrees which alone are recognized for the purposes of

the laws relating to the practice of professions it is necessary for candidates to have obtained a Certificat d'Études moyennes evidencing the satisfactory completion of six years' study in secondary schools or, in the case of degrees in Physical and Mathematical Sciences, five years' study in professional schools.

Brussels is the seat of the headquarters of various International bodies concerned with higher education and research (see Appendix XXIV. (xxxiii.)). The "Université Internationale" held its third session in Sept. 1922 in the Palais Mondial, Brussels. A Semaine Sociale Universitaire is held at Brussels during the summer vacation: Secy.—F. Van Langenhove at the University. The Anglo-Belgian Union, 35 Albemarle St., London, W.1, and 32 rue de Namur, Brussels, has a sub-committee for "échanges intellectuels et universitaires," to whom British students may apply for general information; while special inquiries should be addressed to the respective Secretaries of the four Universities. For particulars of the "Fondation Universitaire," v. Appendix XXIV. (xxxiii.).

There is a State School of Veterinary Medicine at Cureghem, Brussels (Director—G. Gratas). An Agricultural Training College recently established on the Hosseghem estate, Laeken, Brussels, arranges interchange of members with similar institutions in other countries. The Institut des Hautes Études de Belgique, 67 rue de la Concorde, comprises sections for Maths., Physics and Chem.; Nat. Sc., History and Philology; Social, Polit. Econ., and Jurid. Sciences, Arts and Letters (President—G. de Greef).

At Antwerp is an Institut Sup. de Commerce with about 20 Profs.

At Gembloux a State School of Agriculture with about 20 Profs.

At Gand an "Institut Supérieur des Fermentations," rue du Lac.

At Liège an École des Hautes Études Commerciales et Consulaires with about 25 Profs.; École Libre d'Anthropologie, with 16 Profs.

At Mons an École Sup. du Commerce with about 20 Profs. and a well-equipped and largely attended École des Mines.

At Verviers an École Sup. des Textiles with about 20 Profs.

## BRUXELLES (UNIVERSITÉ LIBRE)

*Président du Conseil*: Dr. Paul Héger. *Secrétaire de l'Université*: M. Jean Willems. *Recteur*: Ch. De Keyser. *Présidents des Facultés*: Philos. et Lettres—M. A. Kugener; Droit—H. Rolin; Sciences—H. Wuyts; Méd.—A. Depage; Sc. appliquées—H. Vanderrydt. École des Sc. Polit. et Soc.—G. Bigwood; École de Commerce—L. Wodon.

The new School of Medicine, which will be in close connexion with the City Hospital, has received large endowments enabling it to offer ample facilities for advanced study and research. In addition to the regular courses for undergraduates, "Cours libres" in many special subjects, suitable for graduates and practitioners, are given by more than 20 Profs. The "M.D. Brussels" exams. have been discontinued.

A section of Maritime Law was opened in 1922.

The new School of Applied Sciences is also well equipped for research.

It has depts. of Archit., Aviation (6 Profs.), Industrial Chem., Engineering, Mining, Metallurgy, Railways. A new Laboratory for Aeronautics will be completed during 1922. Five new chairs have been endowed with effect from Oct. 1922. In 1920-21 a grant of 5 million francs contributed by Belgian manufacturers was received for the reorganization of higher technical instruction. Admission to the school is by examn.—the same for Belgians and foreigners.

It rests with the Faculty concerned to decide on questions of equivalence of foreign academic records with the ordinary Belgian qualifications for admission to Univ. courses. Of 393 recipients of *Diplômes scientifiques* in 1921-22, 71 were foreigners, including 1 from Great Britain. Total number of students in 1921-22: 2639. In Oct. 1921 was inaugurated a "*Maison des Étudiants*" Co-operative Society managed by students. It provides cheap and wholesome food and assists students in finding lodgings. A home for girl students offers cheap lodging in comfortable surroundings. Furnished rooms about 100 fr. a month; board and lodging from 300 to 600 fr. a month. Inquiries by foreign students should be addressed to the Secretary of the Univ., 14 rue des Sols.

The Commission for Relief in Belgium promised in 1922 to build a new library, buildings for colleges of law and philos., and a house for students.

## GAND (GHENT)

*Recteur*: Dr. H. E. W. Eeman. *Administrateur-Inspecteur*, Directeur des *Éc. du Génie Civil et des Arts et Manuf.*: A. Roersch. *Doyens des Facultés*: Philos. et Let.—J. Bidez; Droit—G. Eeckhout; Sciences—V. Renaud; Méd.—H. Lebrun. Prés. de l'*Inst. Sup. d'Éduc. Physique*—M. F. Gommaerts. *Inspecteurs des études des Éc. du Génie Civil et des Arts et Manuf.*: *Éc. prép.*—C. Servais; *Éc. Spéciale*—F. Keelhoff. Prés. de l'*Éc. Spéciale de Commerce*—M. E. Dauge.

NUMBER OF STUDENTS IN 1921: 1277, including 276 from Greece, Serbia, Roumania and U.S.A. Of special interest to foreign students are the short courses provided by the *École Spéciale de Commerce* and facilities for advanced study offered by the *Institut Supérieur d'Éducation physique*. British students who have passed examns. qualifying for admission to degree courses in a British Univ. can be admitted to degree courses at Gand without further examn. Legislation promoted by the Flemish Party in 1922 may have the effect of making Flemish the official language of the Univ., but, in any case, instruction in the technical schools of the Univ. would continue to be given in French as well as Flemish.

## LIÈGE

*Recteur*: Ch. De Jace, Prof. of Law and Polit. Econ. *Doyens des Facultés*: Philos. et Let.—H. van der Linden, Prof. of Hist. (President

of the Institut Supérieur d'Art et d'Archéologie annexed to this Faculty—Ch. Michel, Prof. of Greek; Law—E. Mahaim, Prof. of Intern. Law and Pol. Econ. (President of the École Spéciale de Commerce annexed to this Faculty—M. Lohest, Prof. of Geol.); Sciences—T. Fairon, Prof. of Maths.; Méd.—L. Beco, Prof. of Med.; Technology (including Institut Électrotechnique Montefiore)—M. O. De Bast, Prof. of Electricity.

It rests with the Faculty concerned to decide on questions of equivalence of foreign academic records with the ordinary Belgian qualifications for admission to degree courses. A special examn. in Maths. is required for admission to the Faculty of Technology.

TOTAL NUMBER OF STUDENTS IN 1921-22: 2350, including 1016 in the École Spéciale des Arts et Manuf. et des Mines (Faculty of Technology).

## LOUVAIN (UNIVERSITÉ CATHOLIQUE)

*Rector Magnificus*: Mgr. P. Ladeuze, D.D. *Deans of Faculties*: Divinity (Roman Catholic)—J. Lebers, D.D.; Law—M. Defourny, LL.D.; Med.—L. Maldague, M.D.; Philos. and Let.—H. de Vocht, D.Ph.; Science—F. Hachez. Pres. of Sch. for *Polit. and Soc. Sc.*—J. N. M. van der Heuvel, LL.D. (Minister of State). Pres. of *Higher Commercial Sch.*—M. Defourny. Pres. of *Superior Philos. Inst.* (St. Thomas Aquinas)—Mgr. S. Deploige, LL.D., D.Ph. Pres. of Schools for *Engineering, Mining, Arts and Manuf., Archit., and Electricity*—F. Hachez. Pres. of *Agronomie Inst.* and of Sup. Sch. for *Brewery*—E. Leplac. Director of Prep. Inst. for Tech. Schools—L. Marchal.

For admission to the Schools of Applied Science an entrance examn. must be passed. Otherwise British students qualified for admission to British Univs. may be admitted to courses for the State degrees if their qualifications are considered equal to the Belgian Certif. d'Études moyennes; they may also enter without such qualifications for Academic or Scientific non-State degrees. Number of students in 1922: 3244: by faculties—Div., 87; Law, 416; Med., 863; Philos., 361; Sc., 492; Pol. and Soc. Sc., 24; Com., 190; Sup. Philos., 70; Engin., 444; Agr., 258; Tech., 39.

**SPECIAL ADVANTAGES FOR FOREIGN STUDENTS.** Both French and Flemish may be easily learnt. Students can attend, in addition to the special branches selected, the courses of Language and Literature (especially French) in the Faculty of Philosophy and Letters. Louvain being merely a Univ. town and centre of intense intellectual life, they have all facilities for acquiring a thorough knowledge of Belgian Art, Lit., and Culture, either through the various series of conferences organized by the Univ. and Schools, or in the numerous clubs, societies, and seminaries amongst the students, with a professor as chairman, which are most flourishing, and constitute a highly interesting feature of Louvain Univ. life.

The Library is being rapidly restored, and it now includes 500,000

vols., including 280,000 sent from Germany in fulfilment of the Peace Treaty. In 1920-21 a grant of 5 million francs was received from Belgian manufacturers for the reorganization of higher technical instruction.

## BULGARIA

### SOFIA

*Rector*: Zahari Karaoglanof. *Deans of Faculties* and numbers of professors and students in each: Hist.-Philol.—D. Mihalcchef, 35, 430; Law—Dr. Th. Koulef, 22, 900; Med.—Dr. V. Mollof, 25, 475; Phys.—Maths.—Dr. Al. Christof, 35, 420; Agronomy—J. Mollof, 14, 122. Lecturer in English—Konstantin Stephanof.

## CZECHO-SLOVAKIA

[The following notes are based on information kindly supplied by the Czecho-Slovak Bureau of Information, 8 Grosvenor Place, London, S.W.1.]

Universities and High Schools can be established only by law, and the whole of the educational system is administered by the State. School attendance is compulsory for children from 6 to 14 years of age. In the gymnasia and "real schools" which receive pupils at or above the age of 10, courses covering 8 years and 7 years respectively lead to Leaving certificates qualifying for admission to the Univs. and High Schools. Adult education is provided for by univ. extension lectures.

There are no colleges or hostels for students, but they are helped to find lodgings. Much attention is paid to physical training in the Univs. as well as throughout the country, and students usually join one of the world-famous "Sokol" organizations. The admission of foreigners to the Univs. and Technical High Schools respectively is at the discretion of the dean of matriculation and professorial council. In order to be admitted as a regular student of a Univ. it is necessary to pass an examn. in Latin. Time spent in foreign univs. may be included in the prescribed period of study for the doctorate—ordinarily 8 (Med., 10) terms.

The Univ. founded in 1348 by Charles, King of Bohemia, and amalgamated in 1653 with the Jesuit College of Prague under the name "Charles-Ferdinand," was in 1882 divided into two—a Czech (the Charles) and a German Univ. The latter, which has about half as many students as the Charles, has Faculties of Theol., Law, Med., Philosophy, and Nat. Sciences. There are also at Prague Czech and German Technical High Schools, having about 5000 and 2500 students respectively, a Higher Commercial School with a 3-years' course, a State Conservatoire of Music, an Academy of Fine Arts, and an

Observatory. A French Institute was founded in 1920, and an Italian Institute has been planned.

At Brunn (Brno) are the Masaryk Univ. (founded in 1919) with faculties of Philos., Science, Med., and Law; Czech and German Higher Technical Schools; Higher Agric. and Vet. Schools.

At Pressburg (Bratislava) is the Komensky Univ. (founded in 1919), with faculties of law, medicine, and philos. It offers excellent opportunities for research in folklore.

There is a Mining Academy at Pribram. Olomouc has a Catholic theological faculty.

SPECIAL FACILITIES AVAILABLE FOR ENGLISH-SPEAKING STUDENTS. The Director of English Seminar, Prague i., Veleslavinova, 96, is prepared to answer inquiries by students proposing to study at Prague. Many of the Profs. speak English or French. Free Czech courses for English-speaking foreigners arranged. American students' club-house.

### PRAGUE: UNIVERSITA KARLOVA

*Rector*: Cyril Horáček, LL.D. *Deans of Faculties* and numbers of professors and students in each: Theol. (R.C.)—F. Stejskal, D.D., 9, 41; Laws—K. Hermann-Otavsky, LL.D., 19 (and 6 lectrs.), 3584; Philos.—G. Friedrich, Ph.D., 39 (and 50 lectrs. and readers), 1439; Med.—K. Weigner, M.D., 41 (and 24 lectrs.), 2852; Science—K. Domin, Ph.D., 23 (and 31 lectrs., etc.), 897. Under the auspices of the Imperial Studies Committee of the Royal Colonial Institute Sir Harry F. Wilson, K.C.M.G., K.B.E., will lecture at the Univ. in May 1923 on "The British Empire."

### DENMARK

(Contributed by the President, Anglo-Danish Students' Bureau,  
London Branch)

THE UNIVERSITY OF COPENHAGEN has always been, and is at present, the only Univ. of the country. For some time past there has been a general desire to have one more, and the incorporation of the Danish part of Slesvig in 1920 has intensified this need. There are now plans of establishing a second Univ. in Jutland, and the seat of this institution is most likely to be *Aarhus*, the largest city but one (about 100,000 inhabitants), which has many advantages for the realization of such a plan in its great hospitals, library and museum.

HISTORY AND CONSTITUTION. The Univ. was opened in 1479, in accordance with a Papal Bull of June 19, 1475. Beginning as a School of Theology, and by degrees adding the other faculties when the need for them arose, the Univ., faithful to its historical traditions, still contains only five faculties: Theology, Law (including Political Econ.), Medicine, Arts (Det Filosofiske Fakultet), Science (including Maths.). Other subjects, which are in England generally treated as



Univ. subjects, are taught at special institutions at Copenhagen, not being incorporated in the Univ., but, like it, under State supervision: *Engineering* at the Polytekniske Læreanstalt; *Agriculture* at the Royal Vet. and Agr. College; *Fine Arts* at the Royal Academy of Art; *Music* at the Academy of Music (Musikkonservatoriet).

The academical year is divided into 2 terms (Semestre), beginning on Sept. 1 and Feb. 1 respectively. Christmas holidays: Dec. 23–Jan. 6. Easter holidays: Wed. before till Tues. after Easter. Whitsuntide: Sat. before till Tues. after Whitsunday. Long vacation: June 9–Sept. 1. The number of matriculated students of the Univ. proper was in 1922–23: 3502 (including 595 women) as follows: studying Theology—433 (10 women); Law—860 (49 women); Economics and Actuarial Science—190 (25 women); Medicine—941 (143 women); Arts subjects—581 (160 women); Maths. and Natural Sciences—181 (24 women); others—316 (184 women).

The Univ. is a self-governing and, to a great extent, a self-supporting institution besides being a State Univ. Thus it relies for its income partly on large endowments of bygone ages, and partly on State aid. The rector is elected each year by the joint body of the professoriate called Lærerforsamlingen, and the deans of faculties are elected by the faculties. *All tuition is free*, and a very great number of scholarships and fellowships are available to Danish students, often including free residence at one of the colleges. Nearly all lectures are open to the public without fee or ticket. The only fees charged to students are a Matricn. fee of a little more than £1, and a similar fee for examns.

Rector *Magnificus* for 1923 is Prof. J. C. Bock, Dr.med. *Administrator* is Prof. H. Munch-Petersen, Dr.Jur.

ADMISSION. (I.) According to the Statutes any student who wishes to study at the Univ. must matriculate. The matricn. is, however, not an examn., as the entrance examn. will generally have been passed by the student as a Final examn. on his leaving the school or institution at which he has been prepared for the Univ. Thus the matricn. simply consists in paying down a fee once and for all of 22 kroner. Candidates must bring: (i.) a certificate from the school or other Univ. attended; (ii.) birth certificate. The student will then in due time receive the document styled "Akademisk Borgerbrev" in proof of his being admitted as "Civis Academicus."

(II.) Any matriculated student who wishes to attend the teaching of the Univ., and enter for examns., must enter his name on the annual list kept of all students in the course of the month of Sept. of each year. The student will then receive without any fee or payment an *Identity Card* for the year, enabling him to obtain cards of admission to lectures, courses, laboratories, etc. In brief, with this Identity Card in his possession he enters into his rights as "Civis Academicus."

UNDERGRADUATE STUDIES. There is no fixed time for the duration of the courses of studies, the candidate can enter for his examn. when he thinks fit. However, the courses of studies at Copenhagen are generally longer than those at British Univs., the minimum being usually 5 yrs.

**ADVANCED STUDY AND RESEARCH.** The Univ. offers great advantages for research students by its excellent laboratories and a library of more than 500,000 vols. and 6500 MSS., which, amongst other things, contains the famous Arnemagnæian collection of Icelandic and a very valuable collection of Oriental MSS.; also the still greater Royal Library may be mentioned in this connexion. On the whole, as the Univ. is situated in the metropolis of the country, it is unique in that its under-graduate and post-graduate students have at their disposal all the facilities afforded by its central position in the midst of all the most important institutions of the kingdom.

**BRITISH STUDENTS** with a Matricn. certificate from their own Univ. will be admitted on the same conditions as Danish students, and degrees and certificates will be open to them. For advanced study and research, British students will be admitted to all laboratories, seminaries, and other scientific institutions, provided accommodation is available. Knowledge of English is very widespread in Denmark.

**DANISH DOCTORS' DEGREES** will, no doubt, be open to foreign students, but are considered some of the most difficult to obtain, and, as far as can be ascertained, have never yet been taken by any foreigners. After having had his thesis recognized by several censors of the Professoriate, appointed by the Univ., the candidate is required to publish it, and then on an appointed day defend his thesis in public, not only against the said two censors as chief opponents, but against any one from the audience who wishes to take part in the disputation. Theses should ordinarily be written in Danish, but a summary in a foreign language may be appended. In special cases, *e.g.* when the subject of the thesis, or the public for which it is intended, makes it advisable, permission may be given to employ a foreign language (as a rule, only English, French, or German). A summary in Danish should then be appended to the thesis.

**VACATION COURSES.** The only vacation course so far given in Cöpenhagen was a *summer course in Agriculture* at the Royal Vet. and Agr. College from June 25 to July 25, 1920. This course was given to foreign students, with special reference to British students. The lectures were delivered in English by Professors of the College and other agricultural experts on topics like: Organization and Co-operation, Animal and Plant Breeding, Dairy Industry, Seed-Testing, Control of Diseases in Animals and Plants, Education, etc. The course included excursions under the guidance of an English-speaking Agr. expert to experimental stations, farms of animal and plant breeders, schools, agr. summer exhibitions, cattle and horse shows, dairies, bacon and sugar factories, etc. A similar course will probably be conducted this year, but no programme has been issued as yet.

**STUDENTS' REPRESENTATIVE COUNCILS** have been founded by the students of the Univ., as well as those of cognate institutions for each college respectively. The joint representative body of these different councils is the *Danish Students' International Committee*, whose aim it is to promote every kind of international collaboration between the

Univ. circles of Denmark and those of other countries. Foreign students who want to get acquainted with Danish institutions, or are desirous of obtaining information about Danish Univ. life, will therefore always be met with the greatest sympathy by this Committee. All inquiries should be directed to—The Secretary, Danish Students' International Committee, Studiestræde 6, Copenhagen K., Denmark.

*Information Bureau.* Foreign students who want to study or travel in Denmark can obtain information concerning studies, expenses, travelling, etc., on application to *Dansk Studieoplysningskontor*, 6 Studiestræde, University, Copenhagen K., Denmark. Branch offices have been established in the central Univ. towns of different countries.

For England: Anglo-Danish Students' Bureau, 50 Russell Square, London, W.C.1.

France: Foyer franco-danois, 25 rue Servandoni, Paris.

Italy: Comitato Internazionale degli Studiosi danesi, 42 via Campo Marzio, Rome.

In U.S.A. the American-Scandinavian Foundation have undertaken the representation; address: 25 West 45th Street, New York City.

**FELLOWSHIPS.** The only Fellowships for foreign graduates who want to study at the Univ. are the *Exchange Fellowships* between the U.S.A. and the Scandinavian countries offered by the *American-Scandinavian Foundation*. There are 5 each year, and the subjects mentioned in the prospectus of the Foundation are the following: Industrial Organization, Co-operative Agriculture, Agricultural Sciences, Bacteriology, Chemistry and Physics, Folk High Schools, Language and Literature, other Humanistic subjects.

All applications for these Fellowships, which are of the value of one thousand dollars per annum each, should be directed to—The Assistant Director of Students, The American-Scandinavian Foundation, 25 West 45th Street, New York City.

J. H. HELWEG.

January 1923.

## FINLAND

### HELSINGFORS (founded in Åbo in 1640)

This, the only State Univ. in the country, is organized on the same lines as those of the Scandinavian countries. Foreigners who are members of a Univ. of approximately the same standing may carry on their studies in the several faculties and obtain the degrees. All lectures are given in one of the two national languages of Finland, Finnish and Swedish, which are also used in all exams., written and oral. Doctors' dissertations may be in these or any of the great living European languages, or in Latin. The number of immatriculated students is 2900, of whom one-fourth are women. Female students have in every respect the same rights as men. Rector— . . .

DEGREES conferred in the several Faculties: Theol.—Sac. Min. Cand.; Theol. Cand., Lic., Dr. (Hon.). Law—Jur. Utr. (Justice and

Administration) Cand., Lic., Dr. (Hon.). Med.—Med. Cand., Lic.; Med. et Chir. Dr.; Odont. Cand., Lic., Dr. Philos.—Cand., Mag. (Hon.), Lic., Dr. (Hon.) Phil.

Examns. also held in Pedagogy, Metallurgy, Agric., Forestry, Gymnastics. Exemptions from the various examns. may, if corresponding examns. have been passed in a foreign country, be granted by the Chancellor, on the recommendation of the Faculty and the Senate.

At Helsingfors also are a State TECHNICAL HIGH SCHOOL, founded 1908, giving a Diploma and a Doctorate of Engineering, and a COMMERCIAL HIGH SCHOOL, founded 1911, giving a M. Com. Sc.

### THE ACADEMY OF ABO (Swedish)

Founded 1916, opened 1919. Faculties: Humanities, Maths. and Nat. Sc., Polit. Sc., Applied Chem. Degrees: Cand., Mag., Lic., and Dr. Phil.; Dip. and Doct. Engin. Library, 100,000 vols. Teachers, 32; students, 160. Rector—S. Johansson, D.Ph.

The FINNISH UNIVERSITY OF ABO (Turku), founded 1920, opened 1922. Faculties: Humanities, Nat. Sc. Students, 160. Rector—A. H. Werkkunen.

## FRANCE

For full information regarding the French Univs. students in the U.K. are recommended to apply to the Office National des Universités et Écoles françaises, London Branch, 50 Russell Square, W.C.1. In America the Office National has a representative in the Institute of International Education, 419 West 117th St., New York. The Handbook, *Les Universités et les écoles françaises* (300 pp.), published by the Office, contains full details concerning admission, degrees, etc.

The French Univs. which grant degrees and most of the other Institutions of Higher Learning in France, as well as the Lycées and Primary schools, are under the direction of the Minister of Public Instruction. The degrees, diplomas and certificates obtainable at the Univs. are of two kinds—those of the State and those of the Univ.; the latter, while attesting with equal authority the same and other courses of study, do not confer the right to practise a profession in France. Further, the unified control of the Univs. has resulted in giving to the degrees granted by all of them a uniform value. In this connexion it is noteworthy that the word “Université” is frequently used to denote not what is signified by the English word, but the entire system of French education of all grades, *e.g.* “Professeur de l’Université” means a person *qualified* to teach as such, whether in a university or a lycée or college. Uniformity in the essentials of administration does not, however, prevent each Univ. from having a character of its own, and their differentiation is accentuated by the practice of devoting special attention to the study of Local History, Dialects, Industries, and Economic Conditions. The excessive separation from each other of the several Faculties which was enforced during the nineteenth century for

political reasons has given place to a close collaboration which greatly furthers the interests of study and research. Associated with the Univs. are numerous Institutes and Schools for the cultivation of special branches of knowledge, Technology and Research. The Office National draws special attention to the advantages for foreigners of studying in a provincial Univ., where initiation into French life is easier and more intimate relations with teachers and fellow-students can be established than in Paris, and where the cost of living is appreciably lower.

Admission to courses of lectures in the Faculties of Science and Letters of the Univs. can ordinarily be obtained on payment of the prescribed fees by foreign students of either sex, without difficulty and without any preliminary test of their qualifications, and in many places "sections étrangères" have been organized for their benefit, and, for students of the French Language, Literature, History, Institutions, etc., "Cours spéciaux d'études françaises." It is, however, advisable in all cases and necessary for "immatriculation" (entitling, to take part in all the work of the Univ. and utilize its libraries, collections, etc.), that the student bring with him a passport or birth certificate, and (though the Dean of the Faculty may allow matricn. without this if satisfied on other grounds as to the candidate's qualifications) an academic diploma or certificate. It is also advisable to have the latter as well as the former *visé-d* by a French Consul. On arrival in France a declaration of residence must be made at the Préfecture de Police or Mairie and a certificate, "récépissé," of the declaration obtained (free of charge). It may also be necessary to obtain official translations by a "traducteur juré" of the passport, etc.

The method of qualifying for a degree is somewhat similar to that prescribed for London External students: continuous residence and attendance on prescribed courses are not required, the candidate's fitness being ascertained merely by examinations. For all the State and some of the Univ. degrees and diplomas, however, "inscription" at intervals of 3 months is required, but not necessarily at one and the same Univ. It is effected on each occasion by the student himself attending at the office of the Secretary and paying a fee, ordinarily 30 fr. *plus* a library fee of 10 fr. and, for some courses, laboratory fees. At the first "inscription" must be presented a duly *visé-d* passport or birth certificate with official translation, a diploma or certificate equivalent to the French Baccalauréat and the "récépissé" mentioned above. The Baccalauréat does not correspond with our bachelorship, but marks the satisfactory completion of a course of secondary education. A matriculation certificate of a Univ. in the U.K. is regarded as equivalent to it, but the document, whether a matricn. certif. or one of equivalent or higher standard, should be accompanied by an official translation and a formal request on stamped (2 fr.) paper (obtainable from any stamp-vendor) addressed to the Ministry of Public Instruction for an "équivalence du baccalauréat." All these documents—passport, etc., certificate, translations, "récépissé" and request—must be delivered personally to the Secy. of the Faculty or School in which it is desired to register. Graduates seeking to obtain a Doctorat would

similarly apply for an "équivalence" of the Licence instead of the Baccalauréat. A decree of July 24, 1922, gives a list of certain degrees which will be accepted without question as equivalent to the French "licence" for admission to candidature for the doctorates in law, science and letters. They include First-class Honours degrees of all the Univs. of the U.K. and the LL.B. of Scottish and Irish Univs.

In nearly all the Univs. there are special committees who make it their business to assist foreign students in obtaining all needful information. Students under 28 years of age attending holiday courses in French Univs. may obtain tickets at half the ordinary fares for the journey from London and back. In order to get the benefit of these concessions students should apply to the Secretary of the Holiday Course for the requisite vouchers for journeys beyond Paris at least 15 days beforehand, and to the Director of the Office National, 50 Russell Sq., for the journey between London and Paris.

### AIX-MARSEILLE

*Recteur*: Padé (at Aix). *Faculties*: Droit and Lettres at Aix; Sciences at Marseille, where are also an Institut technique supérieur, École d'Ingénieurs, Inst. Colonial with Museum, École de plein exercice de Méd. et de Phm., Faculté libre de Droit, and Observatoire. At Endoume, on the sea-coast, is a Laboratory of Marine Zoology. Special booklet for foreign students. Office des étudiants at the Hôtel-de-Ville, Aix, gives advice regarding board and lodging, etc.

### ALGER

*Recteur*: E. Ardaillon. *Faculties*: Lettres (Doyen—R. Basset); Droit (M. Morand); Sciences (L. Rouyer); Méd. et Phm. (J. Hérail). Certif. d'études fr. and Diplôme d'études universitaires for foreign students.

### BESANÇON

*Recteur*: M. Alengry. *Faculties*: Sciences (Doyen—M. Chaudrer); Lettres (Cloché). École de Médecine. École de Chimie Industriel et Agricole. École préparatoire de Méd. et Phm. Cours de Français pour les étudiants étrangers under direction of M. Rouget, Dir. hon. de l'École Normale (both in terms and vacation). Vacation courses, reorganized in 1920, July 1 to Oct. 31. Registration for whole period, 225 fr.; 2 weeks, 75 fr.; 1 mo., 120 fr., etc. Certif. d'études fr. (Diplôme d'Univ.) obtainable by 3 mos.' vacation course and examn. Instruction also given by correspondence. Special booklet for foreigners. Comité de Patronage (Sec., 2 rue du Chapitre) will supply all necessary information gratuitously.

### BORDEAUX

*Recteur*: F. Dumas. *Faculties*: Droit (Doyen—L. Duguit); Méd. et Phm. (C. Sigalas); Sciences (E. Fallot); Lettres (G. Cirot).

Observatoire. Marine Zool. station at Arcachon. Special courses for foreigners are provided during the sessions but not in vacations: Address—Office des étudiants étrangers, 3 rue Jean-Burguet.

## CAEN

*Recteur*: Maigron. *Faculties*: Droit (Doyen—Pilon); Sciences (A. Bigot); Lettres (A. Barbeau). École prép. de Méd. et Phm. Marine Zool. station at Luc-sur-Mer. Inst. de Droit Commercial. Inst. Technique de Normandie. Cours de Français pour les étrangers, Easter to June 30. Fee, 90 fr. Certif. d'études fr. de l'Univ. or Diplôme élém. de Fr., 30 fr. *Livret de l'étudiant étranger* and all requisite information obtainable from the Comité des étudiants étrangers, which keeps a list of lodgings. Facilities for research in Geol., Bot., Hist. of Normandy.

## CLERMONT-FERRAND

*Recteur*: E. Bataillon. *Faculties*: Sciences (Doyen—R. Chavastelon); Lettres (A. Audollent). École de Méd. et Phm.; Inst. de Géog.; Faculté Libre de Droit; Observatoire Météor.; Station Limnologique de Besse, open Aug. and Sept.; Inst. d'Hydrologie. Publications: *Annuaire* and *L'Univ. de C.-F. et le pays d'Auvergne*, 248 pp.

## DIJON

*Recteur*: H. Pade. *Faculties*: Droit (Doyen—P. L. Lucas); Sciences (C. Queva); Lettres (Ch. Lambert). École prép. de Méd. et Phm. École de Notariat; Inst. Œcol. et Agron. Special French courses for foreigners during terms and vacations. Vacation courses: July 1 to Oct. 31; Cours Commerciaux, July 22 to Sept. 1. Inscription, 10 fr.; 15 days' cours, 60 fr.; 1 mo., 90 fr.; 6 weeks, 120 fr.; 2 mo., 150 fr., etc. List of lodgings and other information obtainable from M. P. Martenot, 3 rue de Metz (postal coupon for reply should be sent).

## GRENOBLE

*Recteur*: F. Dumas. *Faculties*: Droit (Doyen—L. Balleydier); Sciences (E. Gau); Lettres (S. Chabert). École de Méd. et Pharmacie; Inst. Polyt. (Electrotech. and Paper Manuf.); Inst. du Géog. Alpine; Inst. de Phonétique; Inst. de Sc. Comm.; Inst. at Florence and Naples. Special courses for foreigners are provided during the academic year (Nov. 3 to July 31), and vacation courses July 1 to Oct. 31. Fees (Droits d'inscription): During the academic year—150 fr. each semester; vacation—one month 120 fr., six weeks 160, two months 180, three 230, four 260. No diploma required for matricn. for these courses. The Certif. d'études fr. may be obtained by examn. after one semester or vacation course; Dipl. des hautes études de langue et lit. fr., or Dipl. d'études sup. de phonétique fr. after 2 semesters or 1 semester *plus vaca-*

tion course; Doctorat d'Univ. (examn. fee, 100 fr.), after 4 semesters, including at least 2 full attendances (partial dispensation in exceptional cases). The vacation courses have been provided annually for many years, are highly organized, and are attended by foreigners in large numbers. Full information obtainable from Comité de Patronage des étudiants étrangers at the Univ. There is a hostel and club for women, founded in 1919 (Foyer de l'Étudiante. Address—Mme la Directrice).

## LILLE

*Recteur*: G. Lyon. *Faculties*: Droit (Doyen—C. Mouchet); Méd. et Phm. (P. Charmeil); Sciences (Chatelet); Lettres (G. Lefèvre). Inst. de Chimie, d'Electrotech., de Pédag., de Géog., de Papyrologie. Laboratoire de Phonétique. Lab. of Marine Biology at Portel. At Lille are also Catholic Faculties: Theol., Droit, Méd. et Phm., Lettres, Sciences; and many important tech. and professional schools. Courses for Diplôme d'études fr., Diplôme sup. pour l'enseignement de la langue et de la lit. fr. à l'étranger, and Diplôme d'études sup. de phonétique fr., Nov. 1 to June 30; fee—175 fr. for 2 semesters. Partial courses, 1 mo., 30 fr., etc. Facilities for research with a view to Doctorat de l'Univ. in letters, economics, science, pharmacy, medicine. Diplomas in Russian, dentistry, elec. engin., chem. Inquiries should be addressed to Office des étudiants étrangers, 9 rue Auguste Angellier. Vacation courses at Boulogne-sur-mer, July 16 to Aug. 26; supérieur (littéraire, pratique, or commercial), moyen, and élém. Instruction in French Literature, with special reference to B.A. London Pass and Honours examns. 1923 and 1924. Fees—2 weeks 55 fr., 3—75 fr., 4—95 fr., 5—110 fr., 6—125 fr. For particulars apply to M. Guerlin de Guer, Directeur des Cours, 103 rue de Paris, La Madeleine (Nord). Lille has established an Inst. Français in London.

## LYON

*Recteur*: P. Joubin. *Faculties*: Droit (Doyen—L. Josserand); Méd. et Phm. (I. Lépine); Sciences (C. Depéret); Lettres (Chabot). École de Chimie Indust.; École de Tannerie; Inst. Bact.; Inst. de Chimie; Inst. Agron.; Station de Biol. Marine de Tamaris-sur-Mer; Observatoire; Laboratoires de Photométrie et de Photog.; Inst. de Droit Comparé; Inst. Franco-Chinois; Schools of Law and of Engin. at Beirut (Syria). At Lyon are also Catholic Faculties of Theol., Droit, Lettres, Sciences; École Centrale (Tech.); École Nat. Vét. There are a Comité de Tutelle des étudiants étrangers and a Consul Univ. for students from English-speaking countries—P. Courmont, Prof. in the Fac. of Méd.

## MONTPELLIER

*Recteur*: J. Coulet. *Faculties*: Droit (Doyen—J. Valéry); Méd. (E. Derrien); Sciences (Godechot); Lettres (J. Vianey). École



sup. de Phm.; Inst. de Biol., Botanique, Electrothérapie et Radiog.; Jardin des Plantes; Marine Zool. Station at Cette. Special courses (Elem. and Sup.) for foreigners during terms. Institut des Étudiants Étrangers, 12 rue de Carmes. At Montpellier are also an École Nat. d'Agr. and École Sup. de Commerce.

## NANCY

*Recteur*: Ch. Adam. *Faculties*: Sciences (Doyen—P. Petit); Méd. (E. Meyer); Droit (F. Géný); Lettres (P. Souriau); Pharmacie (L. Brunz); Inst. Sérothérap.; Inst. Dent.; Inst. Chim., Electrotech. et de Méc. app., Métall. et Minier, Agr., Colonial, Géol. app., de Brasserie et de Malterie, de Laiterie; Inst. Commercial; Diplômes d'Ingénieur de l'Univ. Special courses for foreigners. Bureau de Renseignements de l'Univ., 13 place Carnot. Electro-technics, July 18–Aug. 22; Mineralogy and Applied Geology, July 18–Aug. 25; Lit., Hist., and Geog., July 23–Sept. 1; Pharmacy, July 18–Aug. 25.

## PARIS

*Recteur*: P. Appell. *Faculties*: Lettres (Doyen—F. Brunot); Sciences (M. Molliard); Droit (Berthelemy); Méd. (H. Roger); Pharmacie (Radais). École Normale Sup.; Inst. de Méd. coloniale, de Méd. légale, de Puériculture, de Chimie app., aérotechnique; Inst. de Pédag., School for preparation of professors of French in foreign countries, and numerous other Insts. in the Faculty of Letters. Special courses for foreigners are provided at the Sorbonne under the care of the Société des Amis de l'Univ. de Paris. The special courses are conducted in vacations as well as during the "année scolaire." No diploma is necessary for admission. Fee for 4 months' course, 300 fr.; 1 month 100 fr. The Vacation courses at the Sorbonne are from July 1 to Sept. 30—France of the past, and Oct. 1–31—France after the war (literature, fine arts, philos., politics). Accounts of the numerous official and other Institutions of higher learning in Paris, of the Libraries, Laboratories, Museums, etc., and of the Associations organized for the benefit of students are included in the *Livret de l'Étudiant*, issued by the Bureau des Renseignements at the Sorbonne. It is estimated (Dec. 1923) that a student needs about 7000 fr. a year to live in any comfort in Paris.

## POITIERS

*Recteur*: L. Pineau. *Faculties*: Droit (Doyen—G. Barilleau); Sciences (J. Welsch); Lettres (P. Boissonnade). École prép. de Méd. et Phm.; Lab. d'analyses agr.; special practical courses, open to candidates without diploma, in the departments of Industrial Electricity and Industrial Chemistry. Special courses for foreigners Tuesday and Friday evenings. Special Certif. d'études littéraires for foreigners (examn. fee, 20 fr.). Vacation courses at Tours, July 1 to Sept. 30.

Comité de Patronage assists foreigners in arranging for board and lodging; Secy.—M. Castelain, Prof. of Engl. Lit., 18 place de la Liberté. Illustrated booklet in French and English.

## RENNES

*Recteur*: H. Gérard-Varet. *Faculties*: Droit (Doyen—M. Turgeon); Sciences (G. Moreau); Lettres (G. Dottin). École de plein exercice de Méd. et Phm. Special French courses (French Phonetics, French Lit. and Hist.) for foreigners during terms; vacation courses at the Collège de St.-Servan Aug. 1 to 31, 1923, in French Lang. and Lit., Phonetics, History, Geog., and Instns. of France. Facilities for research in Celtic. Inquiries may be addressed to Information Bureau of the Faculté des Lettres. At Rennes is an École Nat. d'Agr.

## STRASBOURG

*Recteur*: S. Charléty. *Faculties*: Théol. Cath. (Doyen—Abbé Lang); Théol. Prot. (Ehrhard); Droit (Beudant); Méd. (G. Weiss); Sciences (Muller); Lettres (Pfister); Pharmacie (Jadin). Observatoire; Inst. de Chimie et de Physique; Centre d'études médiévales; Inst. commercial d'enseignement sup. Special courses of the Inst. d'études françaises modernes, Nov. 1 to Feb. 28 and March 1 to June 30. Vacation courses in French and in German, beginning July 1. Special facilities for research in Physics and Maths., Bact., Civ. Law, Comparative Lit., Mediæval Studies, etc. Inquiries may be addressed to Bureau de Renseignements pour les étudiants étrangers at the Univ. Special Club for British students at 2 rue Geiler.

## TOULOUSE

*Recteur*: J. Cavalier. *Faculties*: Droit (Doyen—M. Hauriou); Méd. et Phm. (E. Abelous); Sciences (P. Sabatier); Lettres (H. Guy). Inst. de Chimie, Electrotech. et de Méc. app., d'études méridionales; Observatoire; Stations d'Hydrobiologie et de Pisciculture, Agricole, d'essais de semences et de path. végétale, Hydrol.; Union of French and Spanish students of the French Inst. of Madrid. École Nat. de Méd. Vét. Vacation courses at Bagnères-de-Bigorre and Burgos in July, Aug., Sept., including French for foreigners and Spanish for French and others. The Inst. Français organizes each year in important towns in Spain series of conferences attended by distinguished French professors of various branches of Science. Bureau des Renseignements, 4 rue de l'Université.

## GERMANY

German university statistics show that the student populations are much larger than they were before the war. The numbers of

matriculated students in the five years 1913, '14, '19, '20, '21 (summer semesters) were, in thousands: men—57, 57, 81, 78, 79; women—3, 4, 8, 8, 8. In the Technical High Schools the increases have been even greater—from 12 to 23 and from 1 to 3. In 1921-22 students were distributed as follows (in thousands):

UNIVERSITIES. Berlin, 13; Bonn, 4; Breslau, 4; Erlangen, 2; Frankfurt, 4; Freiburg, 3; Giessen, 2; Göttingen, 3; Greifswald, 1; Halle, 3; Hamburg, 3; Heidelberg,  $2\frac{1}{2}$ ; Jena,  $2\frac{1}{2}$ ; Kiel, 2; Köln, 4; Königsberg, 2; Leipzig, 6; Marburg, 2; München, 9; Münster, 3; Rostock, 1; Tubingen, 3; Würzburg, 3.

TECHNICAL HIGH SCHOOLS. Aachen, 1; Berlin, 4; Braunschweig, 1; Breslau, 1; Darmstadt, 3; Dresden,  $2\frac{1}{2}$ ; Hannover, 3; Karlsruhe, 2; München, 4; Stuttgart, 2.

An Akademisches Auskunftsammt at Berlin (C 2, Universitätsgebäude) has issued a leaflet for foreign students regarding conditions of study in Germany, and is prepared to answer inquiries (if accompanied by a remittance to cover postage). Inquiries regarding student organizations, etc., may be addressed to Auslandsamt der Deutschen Studentenschaft, Untere Maschstrasse, 15, Göttingen. Prospectuses of the courses can be obtained from the several universities in Feb. and June for the summer and winter semesters respectively. A few details are given below regarding universities from which returns have been received.

BERLIN. *Rektor*: Prof. Heffter. *Deans of Faculties* and numbers of teachers and students in each: Theol.—Gressmann, 23, 295; Law—Martin Wolff, 25, 2577; Med.—Krückmann, 222, 2343; Philos. (including Pol. Sc. and Nat. Sc.)—Troeltsch, 279, 7272. Vacation courses in 1922, July 10-22, Literary and Scientific.

BONN. *Rektor*: Prof. Dr. von Franqué. *Deans of Faculties* and numbers of profs. and students in each: Theol. (R.C.)—Vogels, 21, 466; Theol. (Ev.)—Anrich, 14, 108; Law—Landsberg, 18, 544; Med.—Sobotta, 61, 1030; Philos.—Hesse, 110, 2261.

GIESSEN. *Rektor*: O. Eger. Faculties of Theol., Law, Med., Philos. Special depts. of Agric., Forestry, and Vet. Sc. Short courses suitable for foreign students in German Hist., Art, Lit., Lang., Pol. Econ. English-speaking students should apply for information to *Englisches Seminar* der Universität, Ludwigstrasse, 19.

HEIDELBERG. *Rektor*: Prof. Dr. G. Anschütz. *Deans of Faculties* and numbers of profs. and students in each: Theol.—J. Bauer, 11, 131; Law—R. Thoma, 21, 733; Med.—E. Kullins, 60, 782; Philos.—J. Hoops, 68, 1043; Nat.—Math.—L. Jost, 35, 356.

MARBURG. *Rektor*: Schwenkenbecher. *Deans of Faculties*: Theol.—Rade; Law—Merk; Med.—Göppert; Letters and Sc.—Wedekind. Vacation course in German and English planned for 1923. Information about lodgings obtainable from Studentisches Wohnungsamt.

WÜRZBURG. *Rektor*: Prof. Dr. Ruland. *Deans of Faculties* and

numbers of students in each : Theol.—Merkle, 125 ; Law and Polit. Sc.—Kress, 1294 ; Med.—M. B. Schmidt, 1252 ; Philos.—Dimroth, 719. Special (enhanced) scale of fees for foreign students.

## HOLLAND

For full information regarding the Netherlands Univs. students are recommended to apply to the Office of the Netherlands Committee for international academic relations, temp. address, 33 Wasstraat, Leyden. This Committee was established in 1921 with a view to promoting the study of foreigners in the Netherlands and *vice versa* and to strengthening the relations between Dutch and foreign Univs. A *Guide-book for Foreign Students in Holland*, in English, has been published by it. The Committee's Secretary has kindly supplied the Universities Bureau with the following summary.

The Netherlands Univs.—by which term are also denoted here the so-called " Hoogeschoolen " or High Schools, which are on equal footing with the ordinary Univs.—are governed by a Board of Curators, which forms an intermediate body between the Univs. and the Government, the Municipality, or the Private Corporation by which they are controlled. Internal matters are regulated by the Academical Senates, consisting of the entire body of professors and presided over for annual terms by one of them, called Rector Magnificus. Owing to their relatively modern origin, the Dutch Univs. have never possessed the college system. The teaching staffs, though quite adequate, are not so extensive as in some other countries, since the system of private lecturers is not very much developed. The equipment in the way of laboratories and other means of research is generally excellent, and the attendance at the Dutch Univs. being comparatively small, they provide excellent opportunities to students for research and post-graduate work under the direct supervision of the professors.

The ordinary courses of lectures are open to everybody at an annual fee of 200 guilders. Persons not entering for examns. are allowed to follow one or two single courses at a fee of 30 guilders each.

Admission to examns. is granted—as far as British students are concerned—to holders of one of the following certificates, which have been specially recognized : Bachelor, Master or Doctor in the Faculty of Arts of any Univ. of the U.K. or Laval, Montreal, Toronto, Victoria (Toronto), Adelaide, Melbourne, Sydney, N.Z., Cape Town, Allahabad, Bombay, Calcutta, Madras, Punjab. Other exemptions may be granted on application in individual cases by the Minister concerned on advice of a Faculty and the Senate.

The so-called Academical Statute of 1921 has fundamentally altered the studies at the Univs. proper, and leaves the students considerable liberty in the choice of their subjects. Full particulars will be found in the guide-book mentioned above. The degree of Doctor is acquired after having passed the doctorate examn. by writing and defending a dissertation accompanied by at least 6 theses. Other languages than

Dutch are allowed. Exemption from one or more of the Univ. examns. may be granted to individual foreigners in possession of diplomas or degrees by the Minister concerned on the advice of a Faculty and the Senate, as above.

Division of the Academical year in semesters or terms is unknown in Holland. The Academical year begins about Sept. 20 and lasts until about July 10.

The cost of living, everything included, may at present be estimated at about £200. For further particulars concerning lodgings, etc., apply to the Netherlands Students' Organization Bureau, Keizersgracht, 456, Amsterdam.

### AMSTERDAM : MUNICIPAL UNIVERSITY

*Rector Magnificus* : Prof. dr. P. Zeeman. *Secy. of Senate* : Prof. J. H. Scholte. *Deans of the Faculties* : Theol.—Prof. dr. H. Hackmann; Law—Prof. dr. P. Scholten; Med.—Prof. dr. P. Ruitinga; Maths. and Physics—Prof. dr. Hk. de Vries; Philology and Philos.—Prof. dr. Tj. de Boer. Commercial—Prof. dr. N. W. Posthumus. *Foreign Correspt.* : \*Prof. dr. Ph. Kohnstamm.

### AMSTERDAM : FREE UNIVERSITY

*Rector Magnificus* : Prof. dr. P. A. Diepenhorst. *Secy. of Senate* : Prof. dr. A. Goslinga. *Deans of the Faculties* : Theol.—Prof. dr. G. Ch. Aalders; Law—Prof. dr. A. Anema; Philology and Philos.—Prof. dr. A. A. van Schelven. *Foreign Correspt.* : \*Prof. dr. R. H. Woltjer.

### DELFT : TECHNICAL UNIVERSITY

*Rector Magnificus* : Prof. L. A. van Royen. *Secy. of Senate* : Prof. C. Feldmann. *Presidents of the Sections* : Universal Science—Prof. dr. L. H. Siertsema; Hydraulics and Road Constn.—Prof. C. K. Visser; Archit.—Prof. A. W. M. Odé; Mechanics and Naval Archit.—Prof. P. Meyer; Electrotechnics—Prof. H. S. Hallo; Chemical Technology—Prof. dr. J. G. Sleeswijk; Mining—Prof. W. A. Knol. *Foreign Correspt.* : \*Prof. C. Feldmann, Vice-President of the Committee.

### GRONINGEN : STATE UNIVERSITY

*Rector Magnificus* : Prof. dr. I. B. Cohen. *Secy. of Senate* : Prof. dr. A. Kluyver. *Deans of the Faculties* : Theol.—Prof. dr. J. Lindeboom; Law—Prof. dr. H. van Goudoever; Med.—Prof. dr. E. D. Wiersma; Maths. and Physics—Prof. dr. F. M. Jaeger. *Foreign Correspt.* : \*Prof. dr. J. F. van Bemmelen.

### LEYDEN : STATE UNIVERSITY

*Rector Magnificus* : Prof. dr. L. van Itallie. *Secy. of Senate* : Prof. dr. H. Krabbe. *Deans of the Faculties* : Theol.—Prof. dr. H.

Windisch; Law—Prof. dr. A. H. M. J. van Kan; Med.—Prof. dr. P. Th. L. Kan; Maths. and Physics—Prof. dr. L. van Itallie; Philology and Philos.—Prof. dr. G. Kalff. \* Prof. dr. N. van Wyk, Chairman of the Committee for International Academic Relations. \* J. J. L. Duyvendak, Secy. *pro tem.* of the Committee.

## ROTTERDAM: NETHERLANDS UNIVERSITY FOR COMMERCE

*Rector Magnificus*: Prof. dr. H. R. Ribbius. *Secy. of Senate*: Prof. dr. P. G. Verkade. *Foreign Correspt.*: \* Prof. dr. G. W. J. Bruins.

## UTRECHT: STATE UNIVERSITY

*Rector Magnificus*: Prof. dr. J. F. Niermeyer. *Secy. of Senate*: Prof. dr. A. J. P. van den Brock. *Deans of the Faculties*: Theol.—Prof. dr. A. Noordtzy; Law—Prof. dr. C. W. Star Busmann; Med.—Prof. dr. H. J. Laméris; Maths. and Physics—Prof. dr. N. Schoorl; Philology and Philos.—Prof. dr. W. Vogelsang. *Foreign Correspt.*: \* Prof. dr. H. Zwaardemaker.

## UTRECHT: UNIVERSITY FOR VETERINARY SCIENCE

*Rector Magnificus*: \* Prof. dr. G. Krediet. *Secy. of Senate*: Prof. dr. J. H. Hartog.

## WAGENINGEN: UNIVERSITY FOR AGRICULTURE

*Rector Magnificus*: Prof. dr. J. C. Kielstra. *Secy. of Senate*: Prof. B. van der Burg. *Foreign Correspt.*: \* Prof. dr. J. C. Kielstra. Departments of Study: Agriculture, Colonial Agr., Horticulture, Forestry, Colonial Forestry.

(The professors whose names are starred,\* being members of the Committee for international academic relations, are prepared to supply applicants with information concerning studies in the Netherlands.)

## HUNGARY

### UNIVERSITY OF BUDAPEST

(Budapesti Királyi Magyar Pázmány Péter Tudományegyetem)

*Rector*: J. Bársony, M.D. *Deans of Faculties* and numbers of profs. and students in each: Theol.—A. Pataky, 18, 96; Law—A. Notter, 57, 1950; Med.—Z. Vámosy, 150, 3668; Arts—J. Siegescu, 160, 1427. Vacation courses, July 27–Sept. 15, in history and literature, oriental questions, art, geography and economics, and constitutional law, and, possibly, medicine. There is a committee for patronage of foreign students (Külföldi Hallgatók Bizottsága). *Secy.*: Dr. Arthur B. Yolland, Prof. of English, VI. Munkácsy-utca, 23, Budapest.

Students attending summer courses are entitled to diplomatic visé and special facilities for boat journey Vienna—Budapest. The British-Hungarian Chamber of Commerce (Houses of Parliament, Budapest) may also be consulted by students intending to visit Hungary.

At Budapest there are also a Polytechnic and Academies of Art and Music.

## ITALY

ROYAL UNIVERSITIES: Bologna, Genoa, Macerata, Modena, Naples, Padua, Parma, Pavia, Pisa, Rome, Siena, Turin; in Sicily—Catania, Messina, Palermo; in Sardinia—Cagliari, Sassari.

FREE UNIVERSITIES: Camerino, Ferrara, Perugia, Urbino.

OTHER INSTITUTIONS OF UNIVERSITY GRADE under the Ministry of Public Instruction: Institute of Higher Studies at Florence; Academy and Clinics at Milan; Polytechnics at Milan and Turin; Higher Veterinary Schools at Milan, Turin, Naples; Naval School in Genoa. Higher Commercial Schools under the Ministry of Industry, Commerce and Labour at Turin, Genoa, Milan, Venice, Rome, Bari.

For full information regarding Italian Universities the *Annuario degli Istituti Scientifici Italiani* (Athenæum, Rome) may be consulted. As in France, the Universities are under State control, which is exercised through a Directorate-general for Higher Education, a department of the Ministry of Public Instruction. It is by the State that the Professors are in most cases appointed, and the degree courses are prescribed. It follows that the standards and legal values of the degrees are uniform throughout the country, including even the "free" Universities (which are supported by local or provincial bodies instead of by the State). The University system is articulated to a Secondary School course of 8 years (5 in the Ginnasio and 3 in the Liceo), culminating in a "Licenza Liceale" obtained normally at the age of 18.

STAFF. The chief administrative officer in each University is the *Rettore*, who is appointed annually by selection from a list of 3 Professors submitted by an Assembly of all the Professors. At the head of each Faculty or School is a *Preside* or *Direttore* respectively. The instructional Staff consists of Professori (about 1200 in all—excluding the Free Universities) who receive fixed salaries, Dottori Aggregati (super-numerary professors) and Liberi Docenti (licensed teachers).

ORGANIZATION OF STUDIES. The ordinary faculties are: Law; Medicine and Surgery; Physical, Mathematical and Natural Sciences; Letters and Philosophy. In these four faculties the only degree (laurea) is that of Dottore. The degree course covers 4 (in Medicine 6) years. In Engineering a 5 years' course leads to the degree of Ingegnere or Architetto. Attendance at lectures (which are freely open to the public) is optional, and intermediate examinations are not held, the sole conditions for qualifying for degrees being registration, payment

of fees, and passing the examn. (*esame speciale*) at the end of each course and the *esame di laurea* or general examn., at which a dissertation is presented and publicly discussed and theses are orally defended.

In the Faculty of *Letters and Philosophy* candidates for degrees take 12 courses. The following are compulsory subjects for the degree in (1) Letters or (2) Philosophy respectively: (1) Italian, Latin and Greek Literatures, History of Philosophy or Theoretic Philosophy; (2) Theoretic Philosophy, Pedagogy, Moral Philosophy, History of Philosophy, Experimental Psychology, Italian and Latin Literatures, either Greek or some Modern Literature or Ancient or Modern History.

In the Faculty of *Physical, Mathematical and Natural Sciences* the doctorate may be taken in Mathematics or Physics or Chemistry or Natural Sciences. A scheme has been prepared for mixed degrees in Physical Science and Maths., and in Physical Science and Nat. Sc., intended for teachers who are required to instruct in a group of scientific subjects.

In *Medicine* the instruction is of an eminently practical character. *Dentistry* is taught as a branch of Medicine, and there is in connexion with each Medical Faculty a School of *Pharmacy* which confers after a 4 years' course a diploma giving the right to practise the profession of Pharmacy, and after a 5 years' course the degree of Doctor of Chemistry and Pharmacy.

For the degree of *Engineering* or *Architecture* the first 2 years, devoted chiefly to Mathematics, Chemistry, Elementary Architecture, and Ornamental Design, may be taken in any Univ., and the 3 subsequent years in the Polytechnic at Turin, the Higher Technical Institute at Milan, the Engineering School at Padua, or the Naval School at Genoa. Post-graduate courses leading to a special diploma are provided in Turin and Milan.

The *Veterinary* School course covers 4 years and leads to the degree of Dottore in Zooratria.

**ADMISSION OF FOREIGNERS.** Foreigners who have completed the entrance requirements of an approved Univ. in their own country may enter the Italian Univs., and those who have already completed one or more years of study in their own Univs. may be given advanced standing, even to the extent of being allowed, if their studies have already included courses equivalent to those prescribed for an Italian degree, to present themselves forthwith for the final examn. without taking any further courses. Except in very exceptional cases, however, a candidate who has not completed at least a year's work in the Italian Univ. is not likely to succeed in passing the examn. It is important that foreigners should bring with them properly authenticated academic records and birth certificate countersigned by an Italian consul. The matriculation fee is 75 lire, and the annual tuition fee from 125 to 220 lire. Foreigners may without matriculation register as "uditori," and may obtain certificates of attendance at courses and of passing exams.

**SPECIAL NON-PROFESSIONAL DEGREES** (*laurea speciali rilasciate a titolo di particolare cultura scientifica*). These were instituted in 1917



specifically for foreigners, but are also open to Italians. Like the regular professional degrees they imply 4 years of study and at least 12 courses, but the student is allowed more freedom in his selection of courses and they confer no right to practise a profession. A graduate, whether of an Italian or of an approved foreign Univ., need not spend more than one year in residence. The degrees are conferred only by the Royal Univs.

**RESIDENCE.** The Universities do not provide or undertake any responsibility in regard to lodgings. Living expenses are in general lower than in England, especially in Naples, Bologna, Florence and most of the smaller cities.

**TEACHING POSTS IN SCHOOLS.** Candidates for posts as teachers of modern foreign languages in Secondary Schools are required to pass written and oral tests in Italian and in the foreign language, and to give a demonstration lecture. These exams., which are rather severe, are open to foreigners who can produce satisfactory evidence of having had a good general education.

The **SERENA FOUNDATION**, 1,000,000 lire, for the encouragement of the higher study of English at Italian Univs., is administered by a Committee of the British Italian League. The income is to be divided between the Università Bocconi of Milan and the British Institute of Florence.

## BOLOGNA

**R. UNIVERSITÀ.** *Rettore*: V. Puntoni. *Faculties*: Law, Preside—S. Perozzi; Med.—A. Poggi; Science—S. Pincherle; Philos. and Letters—I. B. Supino. Number of students in the several Faculties: 293, 730, 497, 252; in the graduate school for teachers, 573; School of Pharmacy, 168; Vet. Med., 228; Agric., 225; Obstet., 87; Dent., 21. The Univ. Institutes are numerous and well equipped. Among them is one for the study of criminology and police methods. Annexed to the Univ. are an Engineering School with 343 students, and a School of Industrial Chemistry with 87.

**R. ISTITUTO DI BELLE ARTI.** 70 students. Archit., Sculp., Geom.

## GENOVA (GENOA)

**R. UNIVERSITÀ.** Number of students in Law, 388; Med., 375; Nat. Sc. and Maths., 369; Philos. and Letters, 118. Numerous special schools for medical experts, apothecaries, teachers of elementary schools, and numerous Institutes for practical exercises. The Botanic Garden has recently acquired the Bicknell herbarium of Bordighera.

Among other Institutions for Higher Educn. in Genoa are: **R. Sc. SUP. NAVALE**, **R. IST. SUP. DI STUDI COMMERCIALI** (600 students), **ACCADEMIA DI BELLE ARTI** (3 years and higher courses, 340 students).

## NAPOLI (NAPLES)

R. UNIVERSITÀ. Number of students in Law, 2299; Med., 2350; Philos., 666; Science, 3282; in Normal School, 690; Pharmacy, 491. Notable Botanic Gardens, Astron. Observatory, Vesuvian Observatory, Zoological Station with Museum, Aquarium, and Laboratories providing unequalled facilities for study of Marine Biology.

R. SC. SUP. POLITECNICA. 1600 students. Provision for specializing in Civil, Industrial (Chem. or Electro-mech.) and Naval Engineering.

R. SC. SUP. DI MED. VET. 700 students.

R. ISTITUTO ORIENTALE. Sections: Languages; Colonial Culture; Experimental Station of Hygiene and Colonial Biology.

## PADOVA (PADUA)

R. UNIVERSITÀ. *Faculties*: Law, 488 students; Med., 599; Science, 499; Philos. and Letters, 187. School of Pharmacy, 188. Annexed to the Univ. is an Engineering School (2349 students), where students may specialize in Hydraulics (4 Special Laboratories), Drainage, Chemical E., Electrical E.

The courses (Nov.-June) in Italian and Romance Literatures, History of Italian Law, Polit. Econ., Statistics, etc., are arranged so that each term's work is a self-contained unit and they can be taken with profit for a single year. Facilities for research in History of Fine Arts, Slavonic Langs. and Lit., Hydraulics. Exemption from fees allowed to students obtaining high percentage of marks. A *Mensa Universitaria* provides good meals at low prices for Profs. and students.

## PAVIA

R. UNIVERSITÀ. Number of students in Law, 450; Med., 499; Science, 197; Philos. and Letters, 86. Schools of Pharmacy and Indust. Chem.

## PERUGIA

LIBERA UNIVERSITÀ. Number of students in Law, 95; Med., 111; Vet. Med., 35; Phm., 43; Obstet., 23. Vacation courses in History, Archit., Drama, etc., were held in Sept. 1922.

## PISA

R. UNIVERSITÀ. Number of students in Law, 271; Med., 257; Science, 444; Philos. and Letters, 186; in Engineering School, 200; Agric., 133; Vet. Med., 22; Pharm., 21. Notable Institute of Experimental Physics and Meteorology. Connected with the Univ. is a Higher Normal School for Teachers for Secondary Schools.

## ROMA

R. UNIVERSITÀ. Number of students in Law (with School of Applied Criminology), 1330; Medicine (with School of Pharmacy), 1151; Science (with School for Teachers, Math. Seminar, special course of Sciences as applied to Agr.), 1268; Philos. and Letters (with School for Teachers, Schools of Archæology and of Oriental Studies, advanced courses in Art, Philology, and Pedagogy), 534; Higher Normal School, 505.

OTHER STATE INSTITUTIONS. School of Engineering with 700 students; Institutes of Commercial Studies, Fine Arts and Women Teachers.

PONTIFICIA UNIVERSITÀ GREGORIANA. Faculties of Philos., Theol., and Canon Law. Courses for the Doctorate—3 yrs. in Philos. or Canon Law, 4 yrs. in Theol.—provided for candidates for the ministry of the Church.

OTHER PAPAL INSTITUTIONS OF HIGHER EDUCATION: Seminario Romano, Collegio Internaz. "Angelico" dei P. P. Domenicani (confers academic degrees in Philos., Theol. and Canon Law), Collegio Urbano di "Propaganda Fide," Istituto Orientale (founded 1918, providing 2-year courses for missionaries to the East), Istituto Biblico (for Biblical Exegesis, etc.), Scuola Sup. di Musica Sacra.

Many FOREIGN SCHOOLS of Art, Archæology, etc., are maintained at Rome. Among these are the British School in the Valle Giulia and the English Academy of Fine Arts, Via Margutta, 53 B.

THE ISTITUTO INTERNAZIONALE D' AGRICOLTURA, founded at an international convention in 1905, has an annual budget of L. 1,250,000, including a royal grant of L. 300,000, the remainder being furnished by the 55 States represented on the Permanent Commission. It has a Library of 70,000 vols., and issues monthly bulletins and other publications in English, French and Spanish as well as Italian.

## SIENA

R. UNIVERSITÀ. Number of students in Law, 191; Med., 123; Phm., 34; Obstet., 13. Vacation course held in 1922 for foreigners.

## TORINO (TURIN)

REGIA UNIVERSITÀ. *Rettore*: Vittorio Broudi. *Faculties*: Law, Preside—G. Castellori; Med.—P. Giacosa; Philos. and Letters—L. Valmaggi; Science—C. Somigliana. Number of students in the several faculties, 1619, 545, 227, 370; School of Pharmacy, Preside—O. Mattiolo. Numerous Institutes and special schools; those attached to the Faculty of Med., 22 in number, include the Laboratory and Museum of Legal Med. and Anthropology, founded by Lombroso in 1876.

The courses are annual from Oct. 15 to June 15. Of special interest to British students is the course of Comparative English-Italian Law of Prof. M. Sarfatti; peculiar facilities are available in the Univ. Library for research in this subject.

"La lega Italo-britannica" (Pres. avv. Armissoglio, 18 Piazza Statuto, Torino), in correspondence with the British-Italian League of London, is prepared to answer inquiries by British students and help them in finding lodgings, etc.

Among other Institutions for Higher Education in Turin are: R. POLITECNICO. President—B. Boselli; number of students about 2000; complete 5 yrs.' courses in Civil and Indust. Engineering, Archit., Electro-technics, Electro-chemistry, and Industrial Art; R. SCUOLA SUP. DI MED. VET.; R. ISTITUTO SUP. DI ST. COMMERCIALI (400 students); R. ACCADEMIA ALBERTINA (Painting, Sculpt., Archit.).

## CATANIA

R. UNIVERSITÀ. Number of students in Law, 559; Med., 431; Science, 345; Philos. and Letters, 290; School of Pharmacy, 63; Normal School, 170. Observatory of Astrophysic and Volcanic phenomena.

## PALERMO

R. UNIVERSITÀ. Number of students in Law, 927; Med., 643; Science, 617; Philos. and Letters, 417; School of Pharmacy, 46; Normal School, 250. Annexed is an Engineering School with 500 students. There are also State Institutes of Fine Arts and Music.

## FIRENZE (FLORENCE)

R. ISTITUTO DI STUDI SUP. PRATICI E DI PERFEZIONAMENTO. Number of students of Philos. and Philol., 239; Med., 551; Science, 214; Pharmacy, 41; Obstet., 48; Dent., 8; in Graduate School for Teachers, 462. The Doctorate is conferred in Letters, Philos., Nat. Sc., Chem., Med., Pharmacy. Summer courses for foreigners in Italian lang. and lit., hist., and geog., July 20–Sept. 5, 1923. Fee for course, 125 lire; examn., 20 lire. Average *en pension* terms, 30–40 lire a day. For enrolment and information apply to Segretario Corsi Estivi, 2, Piazza S. Marco, Florence, who undertakes to find lodgings if requested.

At Florence are also an Inst. of Social Science providing training for government offices and public life, Training School for Women Teachers, Schools of Fine Arts, Music, Forestry, Colonial Agric.

The British Institute, Via dei Conti, 3, comprises a School in English for Italians, with 3-years', 5-years', and 2-years' (finishing) courses, a reading-room and library, and the organizing of lectures, concerts, etc. Director—Dr. H. Goad. Profs.—G. Ferrando, A. Ricci, Mme. C. Orsi-Plucknett, Miss H. M. R. Cox, Miss M. Cave.

## MILANO

CONSORZIO DEGLI ISTITUTI D' ISTRUZIONE SUPERIORE. The Council of this body, created in 1875 (Address—Piazza Cavour, 4), includes representatives of the following (except 2, 7, 8), and the Royal Observatory, Royal Numismatic Collection, etc.

1. *R. Istituto-Tecnico Superiore*. Direttore — G. Saldini. About 2700 students. Among the subjects provided for in special Schools and Labs. are Paper manuf., Textiles, Oils and Fats.

2. *R. Accademia Scientifico-litteraria*. Equivalent to a Univ. Faculty. Number of students of Philos., 199; Modern Langs., 56; Pedagogy, 616.

3. *RR. Istituti Clinici di perfezionamento* for advanced study and research, open only to Medical graduates. The Dental School is of very high standard. The Clinic for Occupational Diseases has served as a model for other countries.

4. *R. Sc. Sup. di Med. Vet.*, 125 students.

5. *R. Sc. Sup. di Agricoltura*, 200 students.

6. *R. Accademia di Belle Arti*, about 10 profs.

7. *R. Conservatorio di Musica*, about 30 profs.

8. *Università Commerciale Luigi Bocconi* (independent), about 30 Profs. Confers a degree of Doctor of Econ. and Com. Sc. (4 yrs.' course). To receive half the income of the Serena Foundation (v. *supra*).

## VENEZIA

R. ISTITUTO DI BELLE ARTI. 15 Profs. of Archit., Sculpt., Painting, Geom., etc. Number of students (1922-23), 85.

R. SC. SUP. DI COMMERCIO. Confers a Doctorate. About 30 Profs. Courses include Civ. and Internat. Law and Procedure, Arabic and Japanese as well as other Modern Langs., and usual subjects taught in Comml. schools.

## LATVIA

The State Univ. of Latvia, Riga (*Rector*: Prof. E. Felsberg), founded in 1919, has faculties of Archit., Engin., Chem. (including Pharmacy), Agric. (including Forestry), Med. (including Dent.), Maths. and Nat. Sc., Law and Econ., Philol. and Philos., Theol. Prof. of English: W. S. Wilson, M.A., Aberd. Number of students, Dec. 1922, 5336. There is an enhanced scale of fees for foreigners. In 1922 it was decided to make English the first foreign language to be taught in the schools. Besides the Univ., there are in Riga academies of Art and Music.

## NORWAY

The only Univ. is Det Kongelige Frederiks Universitet at Kristiania, where also is a Theological College. Other institutions of interest to

students are the Geo-physical Inst., Bergen, and Biological Inst., Dröbak (July and Aug.). Courses in Oceanography are given at Bergen. The Agric. College, Aas, and Technical High School, Trondhjem, are not at present available for foreign students. Student Associations to which foreigners are admitted exist at Kristiania, Trondhjem, and Aas. Information regarding conditions of study in Norway can be obtained from Studie-oplysningskontoret, Universitetet, Kristiania.

## KRISTIANIA

*Rector* : Prof. Fredk. Stang. *Treasr.*—J. Theiste. *Secy.*—H. C. Wölner. *Deans of Faculties* : Theol.—A. Brandrud ; Science—C. Störmer ; Law—Fredk. Stang ; Letters—Sten Konow ; Med.—K. E. Schreiner.

The Faculty of Law offers a Prize of Kr. 5000, open to all, irrespective of nationality, for a paper to be submitted not later than Dec. 31, 1923 on the following subject : To what extent has Roman Law and Canon Law had an influence on Norwegian Law ?

**ADMISSION AS AN UNDERGRADUATE.** The Collegium (Rector and Deans of Faculties) can admit a foreigner who has passed an examn. corresponding to the " Artium " (the school final examn. for Norse students), which entitles him to admission into the Univ. of his own country, provided that he produces good references as to character.

**EXEMPTION FROM UNIVERSITY PREPARATORY EXAMNS.,** in consideration of having passed corresponding examns. in a foreign country, may be granted by the King on the recommendation of the Collegium.

**RESIDENCE.** There is some provision for boarding students in the colleges. Cost of board and lodging, 200 to 250 kroner a month. The Akademsk Dyrtdiskontor is prepared to assist applicants in procuring rooms.

## POLAND

[The Bureau is indebted to the courtesy of the Polish Legation for the following article.]

The rules relating to Polish Universities were laid down in the law of July 13, 1920. Students, whether Polish or foreign, are ordinarily admitted on a certificate of maturity received in any of the Government schools for general education or any other certificate considered by the Ministry of Education to be equivalent. The course for a degree covers 4 years, except for a medical degree, for which it is 16 terms (trimestres). The degrees are (1) in Univs.—magister and doctor ; (2) in Politechnical schools—engineer and doctor. Fees for the courses are nominal. In addition there are payments for the use of laboratories, libraries, etc. Below is a list of all the Univs. of Poland.

UNIVERSITY OF CRACOW, founded in 1364, reorganized in 1400.

Sections : Theol., Philos., Law and Administration, Med., with Pharm. subsection. 4531 students.

UNIVERSITY OF LWOW, founded in 1661, reorganized in 1816. Sections : Theol., Law and Polit. Sc., Philos., Med., with Pharm. subsection. 4773 students.

UNIVERSITY OF WARSAW, founded in 1816, reorganized in 1915. Sections : Theol. (Cath. and Prot.), Law and Polit. Sc., Philos., Med., with Pharm. and Vet. subsections. 7518 students.

UNIVERSITY OF VILNA, founded in 1576, renewed in 1919. Sections : Theol., Law and Social Sc., Classics, Maths. and Natural Sc., Fine Arts, Med., with Pharm. subsection. 1729 students.

UNIVERSITY OF POSEN : Sections : Theol. (being organized at present), Law, Econ. and Polit. Sc., Philos., Med., with Pharm. subsection, Agric. and Forestry, Technical. 3273 students.

UNIVERSITY OF LUBLIN, founded by a Polish financier, C. Javozynski, immediately after the war. Sections : Theol., Law, Econ., Philos. 1120 students.

Other institutions of University grade :

POLYTECHNIC COLLEGE IN LWOW, founded in 1877. Sections : Communications (roads, waterways, etc.), Architecture (construction, arts), Mechanics (machinery, electro-technics), Chemistry, Agric. and Forestry, Military. 2305 students.

POLYTECHNICAL COLLEGE IN WARSAW. Sections : Constructive engineering, Water engineering, Construction of machinery, Electro-technics, Chemistry, Architecture. 4112 students.

VETERINARY COLLEGE IN LWOW, founded 1881. 307 students.

CHIEF AGRICULTURAL COLLEGE IN WARSAW. Sections : Agric., Forestry, Gardening. 761 students.

MINING ACADEMY IN CRACOW. 282 students.

ACADEMY OF FINE ARTS IN CRACOW; PEDAGOGICAL INSTITUTE IN WARSAW. 258 students.

Two higher schools for ECONOMICS in Warsaw and Cracow.

## ROUMANIA

There are Universities at Jassy, Bucharest, Cluj, and Cernăuți. A Handbook on opportunities for foreign students in Roumania is now in course of preparation by C. Muresanu, B.A., LL.B. (of the Roumanian Legation, 4 Cromwell Place, London, S.W.7), to whom students proposing to visit that country may, in the meanwhile, apply for particulars regarding the Univs. Among the subjects in which special facilities for advanced study and research are to be found in Roumania

are Biology (Cluj), Romance Philology (Bucharest and Jassy), Byzantinology (Bucharest), Central European and Balkanic History (Bucharest—Institute of S. European and Balkanic Studies). *Summer courses*, to which foreign students are admitted, are provided at Valeni de Munte near Ploesti (centre of the Petrol industry—one hour by rail from Bucharest). Director of the School—Neculai Jorga, Prof. of History at Bucharest. Most of the profs. are able to converse in French and German, and the Roumanian language presents no great difficulties to English students acquainted with Latin. English has been made a compulsory subject in the Lycées. In the summer of 1921 Prof. Craigie was invited by the Roumanian Govt. to organize a pioneer summer school for English in Transylvania.

## RUSSIA

A report was prepared in Oct. 1922 on "Life in the Universities of Russia to-day," with special reference to the position of Professors and other teachers, by Harold Gibson, Chief Administrator of International University Relief in Russia. Particulars can be obtained from the Universities Committee, Imperial War Relief Fund, General Buildings, Aldwych, London.

## KINGDOM OF THE SERBS, CROATS, AND SLOVENES

UNIVERSITY OF BELGRADE. *Rektor*: B. Gavrilović. *Faculties*: Arts and Sc.—Dean, N. Vulić; Law—C. Mitrović; Technology—S. Marković; Med.—M. Jovanović Batut; Agric.—P. Djordjević; Theol.—S. Dimitrijević. Over 100 profs. and 7000 undergraduates. The Faculties of Med., Agr., and Theol. are at present small.

UNIV. OF ZAGREB (Agram), with over 100 profs. and 3000 students. Faculties of Theol., of Law, of Philos., Sciences and Letters, and of Agronomy and Forest Economy.

ZAGREB POLYTECHNIC; ZAGREB TRAINING COLLEGE for Teachers; ZAGREB SCHOOL OF VET. MED.

UNIV. OF LJUBLJANA (Laibach), with 70 profs. and 800 students.

Faculty of Law in SUBOTICA, 10 profs. and 100 students.

Faculty of Arts in SKOPLJE, 10 profs. and 40 students.

## SPAIN

Universities at Madrid, Barcelona, Granada, Murcia, Oviedo, Salamanca, Santiago, Seville, Valencia, Valladolid, Zaragoza. Madrid



has also Schools of Fine Art, of Agronomic, Civil, Mining, and Forest Engineering; Madrid and Barcelona have Schools of Industrial Engineering and of Architecture; Barcelona, a School of Agriculture (advanced); Cadiz, a Faculty of Medicine; and Madrid, Cordoba, Leon, Santiago, and Zaragoza, Veterinary Schools.

### MADRID: UNIVERSIDAD CENTRAL

*Rector*: Exmo. Sr. Don José Rodríguez Carracido. *Vice-Rector*: Ilmo. Sr. Don Rafael de Ureña y Smenjaud; General Secy.: Don Francisco de Castro y Pascual. *Deans of Faculties*: Filosofía y Letras—Ilmo. Sr. Don Adolfo Bonilla y San Martín; Ciencias—Ilmo. Sr. Don Luis de Toledo y Zulueta; Derecho—Ilmo. Sr. Don Rafael de Ureña y Smenjaud; Medicina—Exmo. Sr. Don S. Recasens y Giról; Farmacia—Exmo. Sr. Don José Casares Gil.

The ordinary qualification for admission is the "Bachiller"-ship (marking the completion of a course of secondary education; similar to the French Baccalauréat) or its equivalent. The official course for the Doctorate covers one year.

VACATION COURSES FOR FOREIGNERS in Madrid are organized by the Centro de Estudios Históricos (Almagro, 26), an institution created by the Junta para Ampliación de Estudios e Investigaciones Científicas. In 1923 (the 12th yr.) the course will cover about 4 weeks in July and Aug., the lectures being devoted to Spanish Lang., Phonetics, and Lit., Spanish Art, History, Geog., Pedagogy, and Contemporary Politics. Special courses in contemporary lyrics and novel, Spanish music, commercial Spanish, and intonation. Registration for entire course, 125 pesetas; special courses, 30 pesetas each. Board and lodging in Hostel (the Residencia de Estudiantes, built by the Junta for students and equipped with bathrooms, library, playing-fields, etc.) costs from 14 to 20 pesetas a day. A number of Spanish instructors and students live in the Hostel.

The "Anglo-Spanish Society of Spanish-speaking Countries and the British Empire," 5 Cavendish Square, London, W.1, aims at promoting, among other objects, the foundation of Travelling Scholarships, interchange of teachers and students, facilities for British students in Spanish-speaking countries, etc. The Honorary Secretaries are prepared to answer inquiries by British students proposing to visit such countries.

### SWEDEN

[The Bureau is indebted to the courtesy of the Swedish Legation and the Secretary of the Chancellor of the Universities of Sweden for the following article.]

The State Universities at Uppsala and Lund, a Medical high school (faculty)—Karolinska medico kirurgiska institutet—at Stockholm, and the Stockholm and Göteborg "High Schools," founded on private

donations, are all under the supervision of the *Chancellor of the Universities of Sweden* (C. Swartz, formerly prime minister), whose official address is Universitetskanslersekspektionen at Stockholm. Secy.: O. Croneborg.

There are also at Stockholm High Schools of Technology, of Forestry, and of Pharmacy, a College for Commercial studies—*Handelshögskolan*—a Veterinary College, Colleges for Music (at the Kungl. Musikkonservatorium), and for Fine Arts (at the Kungl. Konsthögskolan), and a Central Institute for Gymnastics; at Ultuna and at Alnarp are Agric. Colleges. Each of these institutions is governed by a special Board of Directors.

For ADMISSION to one of the State Univs. a foreigner should apply to a special Board of the Univ.—*Consistorium Minus*. If he is not already matriculated in Sweden he must prove that he is a student at a foreign State Univ., or obtain a Royal dispensation, application for which should be addressed to the King (Till Konungen) at the Ministry of Education (Ecklesiastik departementet) at Stockholm. For admission to the Karolinska institutet a foreigner should likewise apply to the same ministry: permission is usually granted if an examn. equivalent to the Swedish matriculation examn. has been passed, but sometimes a student is required to undergo a supplementary examn. for admission. Application for matriculation at Stockholmshögskola is made to a special committee (Rektorsnämnden) appointed by the Senate (Lärarrådet). A certificate from one of the profs. to the effect that the student is sufficiently advanced in his studies to follow the courses with profit is required. A foreigner who has passed an examn. which entitles him to admission to a Univ. of his own country will always obtain such a certif. Good personal references must also be given. At Göteborgshögskola students who have not passed the Swedish matricn. examn. may be matriculated on application to the Board—*Styrelsen*.

EXAMINATIONS. A foreigner wishing to pass an examn. at any of these institutions should apply for Royal permission as described above. Examns. passed elsewhere are taken into consideration.

FEES for matricn. at Uppsala, 12 kr.; Lund, 12.25 kr.; Karolinska inst., 0.25; Stockholmshögskola, 25 (science, 50); Göteborgs, 10. For examn. ordinarily 15 kr. for each complete examn.; at Stockholmshögskola, 25. Fees per term only at Stockholmshögskola: Science, 100 kr.; Laws, 55; Letters, 63. Various fees for many courses and lectures, and subscriptions to students' Assocs.

STUDY AND RESEARCH WITHOUT MATRICULATION OR EXAMINATION. Public lectures are given at the Univs. and High Schools and permission to follow courses is ordinarily obtainable. A foreign student can ordinarily obtain permission for special study or scientific research at the Karolinska inst. if the places are not all required for Swedish students.

## UPPSALA

The Univ., established in 1477 under a Papal Bull, has faculties of Theol., Law, Med., and Philos., the last comprising (1) Letters, including History and Languages, etc., and (2) Science—Maths. and Natural Sc. Number of students, 2543.

*Rector Magnificus* : Prof. L. Stavenow. *Deans of Faculties* : Theol.—G. Lizell ; Laws—V. Lundstedt ; Med.—G. Göthlin ; Philos.—A. Hahr (Letters), T. Svedberg (Science).

## LUND

Founded 1666, opened 1668. *Rector Magnificus* : Prof. J. C. W. Thyrén. *Deans of Faculties* : Theol.—E. Aurelius ; Laws—E. Kallenberg ; Med.—G. Ahlstrom ; Philos.—E. Hellquist (Letters), H. Wallengren (Science). Number of students, 1406.

## STOCKHOLM

KAROLINSKA MEDIKO-KIRURGISKA INSTITUTET. An independent High School founded 1810. *Rector* : Prof. F. Lennmalm. *Inspector of Dental School* (Tandläkar institutet, founded 1898) : Prof. J. Åkerman. 894 students.

STOCKHOLMSHÖGSKOLA. Active since 1878, includes faculties of Science, Laws, and Letters, the last being only for studies in Polit. Econ., Polit. Sc., History of Art, History of Literature, History, Geog., Archæology, and Northern Langs. 961 students.

*Rector* : Prof. I. Bendixson. *Deans* : Science—H. von Eulerchelpin ; Laws—B. Ekeberg ; Letters—M. Lamm.

## GÖTEBORG

GÖTEBORGS HÖGSKOLA began its work in 1891. It has a complete faculty of Letters. *Rector* : Prof. O. Sylwan. 203 students.

## SWITZERLAND

[For the following article the Bureau is indebted to the courtesy of the Swiss Legation and the Office Central, Universitaire Suisse, rue de l'Hôpital 30, Berne. For further information application may be made to the Office Central.]

In the Cantons of the Swiss Confederation, as in the United States of America, Higher Education is legislated for by the constituent states (in the Swiss Confederation, the Cantons) severally, and the only Institution of University grade controlled by the Confederation is the " École polytechnique fédérale " at Zürich.

## THE CANTONAL UNIVERSITIES

Although the Cantons are free to organize their Univs. as they please, untrammelled by federal laws, there exists among them an understanding on the most important points so that it is possible to generalize to some extent in describing them. It should nevertheless be borne in mind that such generalizations imply "no uniform prescription but merely coincidence of particular dispositions." For exact information it is necessary to refer to the regulations of the particular Univ. in question.

The following list gives (a) the number of professors, (b) the number of regular students, (c) the language of instruction of each of the Univs. :

BÂLE : (a) 140 ; (b) 1000 ; (c) German.

BERNE : (a) 170 ; (b) 1700 ; (c) German.

FRIBOURG : (a) 70 ; (b) 500 ; (c) French and German.

GENEVA : (a) 170 ; (b) 900 ; (c) French.

LAUSANNE : (a) 110 ; (b) 900 ; (c) French.

NEUCHÂTEL : (a) 60 ; (b) 200 ; (c) French.

ZURICH : (a) 100 ; (b) 1600 ; (c) German.

FACULTIES. Theology, Law and Political Sciences, Medicine, Letters (philos., languages, history), Sciences (Maths. and Nat. Sc.). Berne and Zurich have also a faculty of Vet. Med.; Lausanne an Engineering School. Fribourg and Neuchâtel have no Med. faculty.

The COURSES are organized by *semesters*. The winter semester is from the middle of Oct. to the middle of March, the summer from the middle of April to the end of July. Immatriculation may be at the beginning of either semester and students choose freely the courses they wish to follow, the study plans published by the several faculties being merely intended for the guidance of those who wish to adopt a normal curriculum.

DEGREES obtainable are the *Licence* and the Doctorate. The former is not ordinarily conferred in the German-speaking Univs. Almost all the faculties confer the Doctorate and there are numerous special examns. which may be taken with a view to it, each carrying its special Diploma. Candidates must prove that they have studied in a Univ. during a certain number of semesters, ordinarily 6, of which at least 2 have been passed in the Univ. which is asked to confer the degree. Graduation fees are from 300 to 400 fr., and, in addition, candidates are required to supply within a certain time after the examn. printed copies (generally 200) of their dissertation.

IMMATRICULATION. Regular students (minimum age, 18) must present (a) A certificat de maturité of a recognized Swiss gymnasium or a similar foreign certificate entitling to admission to a foreign Univ. (Entrance examns. are arranged for students whose certificates are insufficient); (b) certificate of character; (c) passport (or equivalent document). The admission fee varies from 10 to 62 fr. and there are

sundry other initial charges, *e.g.* at Berne : library 5 fr., Sick Fund 10 fr., General Fund 2 fr.

Certain courses are open to unmatriculated persons as "auditors," and admission to others may be obtained from the professors concerned, who in some cases require evidence of suitable preparation. The fee for inscription as "auditor" is nominal (*e.g.* 1 fr.), but the student is required to pay instruction fees.

**INSTRUCTION FEES.** The system generally adopted is to levy a tax for the semester according to the number of hours per week assigned to the courses taken. The rate per hour is ordinarily 5 fr. ; at Geneva and Zurich 6 fr. A student who, *e.g.* at Bâle, takes an inscription for 20 hours a week would pay 100 fr. At Fribourg each student pays a fixed sum, whatever the number of hours of his courses—winter 60 fr., summer 50 fr.

Special taxes (from about 10 to 50 fr.) are levied for the use of laboratories, clinics, etc. Sundry subscriptions, as for Sick Fund, General Fund, Library, etc., amount to from 5 to 25 fr.

**SPECIAL INSTITUTIONS AND FACILITIES.** *Sick Fund.* Students are required to insure against sickness expenses (hospital, or doctor and chemist). *Reading Rooms* are organized and administered, for the most part, by the students. *Museums, Libraries,* and other collections in each University town are open to students. *Theatres* generally admit students at reduced rates. *Scholarships* are comparatively unimportant and are not open to foreigners, but *Prizes* open alike to Swiss and foreign students are offered in most faculties. The first prizes range from 500 to 1000 fr. The most important competition is the "Concours internationale de la Fondation Travers-Borgstroem" of Berne : subject, "La Nationalisation du crédit," first 2 prizes 25,000 fr. and 20,000 fr., closing date March 31, 1924.

**LODGING.** Information obtainable from the Secretariat of the Univ. ; at Bâle and Zurich from the Comités d'Étudiants.

**STUDENT ORGANIZATIONS.** The Comités at Bâle and Zurich manage the reading-rooms, procure lodgings, purchase books, organize conferences, cheap meals and clubs, encourage sports and answer general inquiries. The general body of students constitute the "Fédération Suisse des Étudiants." In each Univ. exist numerous student societies, characterized by the political opinions, social connexions, or religion of their members. Notable among them are those devoted to sport.

**BÂLE.** *Rektor* : A. Simonius. *Deans* : Theol.—F. Wendland ; Law—E. Ruck ; Med.—G. Hotz ; Philos.—F. Rintelen (Philol.-Hist.), and A. Buxtorf (Maths.-Nat. Sc.).

Exceptionally, no holiday course for foreigners in the year 1923.

**BERNE.** *Rektor* : H. Hoffmann. *Deans* : Evang.-theol.—M. Lauterburg ; Kath.-theol.—E. Herzog ; Law—Ph. Thormann ; Med.—G. Sobernheim ; Vet.-Med.—Fr. Schwendimann ; Philos.—K. Iaberg and L. Crelier.

*Travers-Borgstroem Foundation.* Under the patronage of the Univ. an *International Competition* has been organized for Prizes for an essay on "The Nationalization of Credit—a critical study of the organization of credit in a given country, and proposals for its nationalization." Prizes: 25,000 fr., 20,000 fr., 10,000 fr., and 15 of 3000 fr. each. Essays receivable up to March 31, 1924.

FRIBOURG. *Recteur*: B. Allo. *Deans*: Theol. Cath.—F. Marin-Sola; Law—G. I. Liesker; Letters—W. Oehl; Sciences—A. Ursprung. Holiday courses for foreigners in the summer 1923.

GENEVÂ. *Recteur*: R. Weber. *Doyens des Facultés*: Sciences—L. W. Collet; Let.—V. Martin; Sc. Econ. et Soc.—W. Rosier; Droit—G. Werner; Theol.—E. Rochat; Méd.—H. Cristiani. *Secrétaire de l'Université*: A. Roussy. *Séminaire de français moderne*; *Inst. des Hautes Études Commerciales*; *Inst. Dentaire*.

Holiday courses for foreigners, July 15 to Sept. 15, 1923, arranged in self-contained units of various duration. Full information obtainable from Comité de Patronage at the Univ. Booklet, *Geneva, an Educational Centre*, issued by the Assocn. of the Interests of Geneva, 3 place des Bergues; also an excellent *Guide de l'Étudiant à Genève*, by A. Roussy, 1921-22. Board and Lodging in *pensions*, 175 to 300 fr. a month.

Of special interest to foreigners are the Linnæan Gardens and Laboratory of Alpine Biology at Bourg-St-Pierre (Valais), open July 15 to Sept. 15, regarding which details may be obtained from Prof. R. Chodat at the Univ.; courses in Pedagogy at the Institut J. J. Rousseau. At Geneva there are also exceptional facilities for research in Greek Papyrology and Greco-Roman Institutions; the Calvinistic Reformation (special library of the Soc. du Musée hist. de la Réforme); Industrial Economics. There are numerous Medical and Dental Laboratories, Clinics and Institutes. Many valuable prizes are open to foreign as well as to Swiss students, in Literature, History, Science and Medicine.

LAUSANNE. *Recteur*: E. Cordey. *Deans*: Theol. Prot.—A. Fornerod; Law—A. Rougier; Med.—M. Arthus; Letters—G. Bonnard; Sciences—M. Paschoud. Attached to the Faculty of Law are Schools of Social Sciences—*Director*: M. Millioud; and Commerce—*Director*: L. Morf; to the Faculty of Sciences a School of Pharmacy—*Director*: E. Wilczek. The Engineering School has about 25 profs.—*Director*: I. Landry.

Holiday courses for foreigners, July 19 to Aug. 29, 1923, arranged in three periods of a fortnight each. Courses of lectures on recent and contemporary French literature. Practical and Phonetic classes. Excursions in the mountains every Saturday. Booklet containing full information sent on application to Secrétariat de l'Université, Lausanne.

NEUCHÂTEL. *Recteur*: C. Meckenstock. *Deans*: Letters—G. Jequier; Science—A. Berthoud; Law—A. de Maday; Theol. Prot.

—P. Humbert. *Director of French Classes for Foreigners* (Séminaire de français): A. Dubied. *Director of Commercial Classes*: P. E. Bonjour.

Holiday courses for foreigners, July 16 to Aug. 11, and Aug. 13 to Sept. 8. Full information obtainable from Secrétariat de l'Université, Neuchâtel.

ZÜRICH. *Rector*: E. Hafer. *Deans*: Theol.—J. Hausheer; Law—P. Mutzner; Med.—W. R. Hess; Vet. Sc.—O. Zietzschmann; Philos.—A. Wreschner; Sciences—A. Ernst.

## L'ÉCOLE POLYTECHNIQUE FÉDÉRALE, ZÜRICH

*Recteur*: Prof. Dr. W. Wyssling. Names of Deans and numbers of students in the several divisions: Architecture—Potterat, 98; Civil Engineering—Rohn, 323; Mechanical and Elec. Engineering—Grossmann, 726; Industrial Chemistry—Bosshard, 290; Pharmacy—Eder, 70; Forestry—Badoux, 76; Agriculture—Moos, 138; Rural Engineering and Surveying—Baeschlin, 21; Normal school—Meissner and Staudinger, 44. Total number of professors, 115; students, 1795, including 283 foreigners, of whom 37 were Norwegian.

Instruction is given both in German and in French.

The courses are organized by the academic year, and admission as a regular student is ordinarily possible only at the commencement of the year (Oct.). The winter semester is from the middle of Oct. to the middle of March, the summer from the middle of April to the end of July. The programme of studies is obligatory for all regular students, and only those who pass the examns. held at the end of each semester may follow the higher degree courses. The various Schools hold preparatory and final diploma examns., and the Doctorate is as a rule conferred only on those who, having already received diplomas, present a thesis and undergo an oral examn.

Immatriculation conditions are stricter than in the Univs. British and most other foreign students are required to undergo an Entrance examination, except for attendance as "auditeurs" at the cours libre in philosophy, political science, mathematics, and natural and technical sciences. Inscription should take place on or before Sept. 10, fee 10 fr. A limited number of "Auditeurs" are admitted.

Instruction fees for foreigners, 600 fr. p.a. Other general fees come to about 25 fr. p.a.

Special Institutions and facilities—as in the Univs.; students are organized in an Assocn. des Étudiants (E.P.F.).

Of special interest to British and other foreign students are the courses in *Hydro-Electrical Engineering* (Wyssling and Prasil) and *Chemical Engineering* (Bosshard and Fierz: Full course in dyestuffs, intermediaries, explosives, carbohydrates. Winter term—fats, oils, rubber, petroleum, textile chemistry. Laboratories for experimental work daily). Facilities for research in Forestry are also available.

## UNITED STATES OF AMERICA

In the 670 Universities, Colleges, and Professional Schools which submitted returns for 1919-20 to the United States Bureau of Education there were enrolled in that year 521,754 students, of whom rather more than one-third were women. Of these institutions 109 were under public and 561 under private control; 82 were independent professional schools. Of 586 Univs. and Colleges with undergraduate students 354 were co-educational, and reported 162,558 men and 96,908 women; 117 were maintained exclusively for men and 115 exclusively for women. Of the total number of students 59,309 were in pre-matriculation departments and 15,612 were in graduate schools. Law students numbered 20,992, medical 14,242, dental 8809, theological 7216, pharmacy 5026, engineering 51,908. For full information about American Universities students in this country are advised to apply to the American University Union in Europe, British Division, 50 Russell Sq.; on the continent of Europe to the headquarters of the Union, 1 rue de Fleurus, Paris. In Rome there is an American Academy at Porta San Pancrazio 29. In Belgium the Fondation Universitaire, which administers numerous scholarships tenable in American institutions of higher learning, has its office at 74 rue de Namur, Bruxelles. In America reference may be made to the Secretary to the Board of Trustees of the American University Union, Prof. J. W. Cunliffe, Columbia Univ., New York City, or to the Institute of International Education, 419 West 117th St., New York. A recent Australian view of American Univ. life and organization is given in *The American University* by E. R. Holme of the Univ. of Sydney (Angus and Robertson, Ltd., Sydney, 1920, 7s. 6d.). A description of American Univs. from the point of view of a French scientist is given in *Universities and Scientific Life in the U.S.A.*, by Prof. M. Caullery (Oxford Univ. Press, 1922, 10s. 6d.). The Bureau of Education of the United States Department of the Interior published in 1921 a Bulletin (No. 39 of 1920) on "Facilities for Foreign Students in American Colleges and Universities." This is obtainable from the Government Printing Office, Washington, D.C., at 15 cents a copy. The Inst. of International Educn. has published a *Guidebook for Foreign Students in the U.S.A.* (1921), obtainable in this country from the American Univ. Union. The attractiveness of New York for foreign students will be greatly enhanced as a result of the donation by J. D. Rockefeller, junr., of funds for an International House as a residential centre for 500.

AMERICAN DEGREES (non-professional). The following notes are based on a Report presented by a Committee of the American Council on Education to the French Ministry of Public Instruction: The American Colleges, both those which are independent institutions and the colleges of liberal arts within Universities, award the A.B. (or B.S.) degree to students who complete a 4 years' course. Ordinarily the student at the time of admission to the college is about 18 years of age and has completed a 4 years' course in a secondary school. A



considerable portion of his work at college belongs, however, to what in European countries is called secondary education. A peculiarity of the American system of grading, both in secondary and in higher institutions, is the weight attached to the length of time spent under instruction, a degree being attainable by gradual accumulation of a specified number of "credits" (certificates of definite periods of time spent successfully under instruction), which thus largely replace the examinations used in other countries for testing the student's capacity at various intervals. The college graduate who aspires to the degree of M.A. (or M.S.) proceeds to the Graduate School of a University (the professional schools of law, medicine, etc., with few exceptions, admit undergraduates), and there pursues his studies, either general or, if aiming at a subsequent doctorate, specialized, for one year. The Ph.D. requirements are ordinarily "3 years of resident study, beyond the baccalaureate, the presentation of a thesis embodying the results of original research, and the passing of a comprehensive examination testing the candidate's knowledge of his chosen field of learning."

The Report points out that higher education in the U.S.A. is largely autonomous, there being no control by the Federal Government and little control by the political authorities of any State. Such standardization as has been effected has come through the voluntary efforts of groups of institutions having similar ideals and purposes. Conspicuous among these is the Association of American Universities. The Report recommends the admission to candidacy for the State Doctorate of any student holding the M.A. or M.S. degree of an institution belonging to the Assocn. of American Univs. who has specialized in the branch of learning chosen for the work for the doctorate, and proved to the satisfaction of the head of his department and of the Dean of the Graduate School of his Univ. his capacity for research; also candidates for the Ph.D. in one of those institutions who have completed 2 or more years of study for the Ph.D., and proved their capacity for research; also holders of a Ph.D. from one of those institutions. The institutions in question are starred (\*) in the list given below. In other cases it is suggested that reference should be made to the Committee, 24-26 Jackson Place, Washington.

Below is given a list of 166 institutions approved by the Association of American Univs. This list has been adopted by most of the Univs. of the U.K. for the purpose of admission of graduates with a view to qualifying for the Ph.D. degree (v. p. 15).

Allegheny College, Meadville, Pa.; ‡Amherst College, Amherst, Mass.; †Barnard College, New York, N.Y.; Bates College, Lewiston, Me.; Beloit College, Beloit, Wis.; Boston University, Boston, Mass.; †Bowdoin College, Brunswick, Me.; †Brooklyn Polytechnic Institute, Brooklyn, N.Y.; Brown University, Providence, R.I.; Bryn Mawr College, Bryn Mawr, Pa.; Carleton College, Northfield, Minn.; †Case School of Applied Science, Cleveland, Ohio; \*Catholic University of

\* Institutions starred are members of the Association of American Universities.

† Added at the meeting of the Association in November of 1917.

‡ For men only.

America, Washington, D.C.; †Central University of Kentucky, Danville, Ky.; Clark College, Worcester, Mass.; †Clarkson School of Technology, Potsdam, N.Y.; \*Clark University, Worcester, Mass.; Coe College, Cedar Rapids, Iowa; Colby College, Waterville, Me.; †Colgate University, Hamilton, N.Y.; ††College of the City of New York, New York, N.Y.; †College of St. Catherine, St. Paul, Minn.; §†College of St. Elizabeth, Convent Station, N.J.; Colorado College, Colorado Springs, Colo.; \*Columbia University, New York, N.Y.; Cornell College, Mt. Vernon, Iowa; \*Cornell University, Ithaca, N.Y.; Dartmouth College, Hanover, N.H.; De Pauw University, Greencastle, Ind.; Dickinson College, Carlisle, Pa.; Drake University, Des Moines, Iowa; Drury College, Springfield, Mo.; Earlham College, Richmond, Ind.; §Elmira College, Elmira, N.Y.; †Fordham University, Fordham, N.Y.; Franklin College, Franklin, Ind.; Goucher College, Baltimore, Md.; Grinnell College, Grinnell, Iowa; †Hamilton College, Clinton, N.Y.; \*Harvard University, Cambridge, Mass.; †Haverford College, Haverford, Pa.; Hobart College, Geneva, N.Y.; \*Indiana University, Bloomington, Ind.; Iowa State College, Ames, Iowa; \*Johns Hopkins University, Baltimore, Md.; †Kenyon College, Gambier, Ohio; Knox College, Galesburg, Ill.; †Lafayette College, Easton, Pa.; §†Lake Erie College, Painesville, Ohio; Lake Forest College, Lake Forest, Ill.; Lawrence College, Appleton, Wis.; Lehigh University, South Bethlehem, Pa.; \*Leland Stanford Jr. University, Stanford University, Cal.; †Macalester College, St. Paul, Minn.; Marietta College, Marietta, Ohio; †Massachusetts Agricultural College, Amherst, Mass.; Massachusetts Institute of Technology, Boston, Mass.; Miami University, Oxford, Ohio; Middlebury College, Middlebury, Vt.; §†Mills College, Oakland, Cal.; §†Milwaukee-Downer College, Milwaukee, Wis.; Mount Holyoke College, South Hadley, Mass.; †Municipal University of Akron, Akron, Ohio; New York University, New York City; \*Northwestern University, Evanston, Ill.; Oberlin College, Oberlin, Ohio; Ohio State University, Columbus, Ohio; Ohio Wesleyan University, Delaware, Ohio; Pennsylvania State College, State College, Pa.; Pomona College, Claremont, Cal.; \*Princeton University, Princeton, N.J.; Purdue University, Lafayette, Ind.; Radcliffe College, Cambridge, Mass.; §†Randolph-Macon Women's College, Lynchburg, Va.; Reed College, Portland, Oregon; †Rensselaer Polytechnic Institute, Troy, N.Y.; Ripon College, Ripon, Wis.; §†Rockford College, Rockford, Ill.; †Rose Polytechnic Institute, Terre Haute, Ind.; †Rutgers College, New Brunswick, N.J.; Smith College, Northampton, Mass.; State College of Washington, Pullman, Wash.; \*State University of Iowa, Iowa City, Iowa; †Stevens Institute of Technology, Hoboken, N.J.; Swarthmore College, Swarthmore, Pa.; Syracuse University, Syracuse, N.Y.; Trinity College, Durham, N.C.; †Trinity College, Hartford, Conn.; †Trinity College, Washington, D.C.; Tufts College, Medford, Mass.; Tulane University, New Orleans, La.; †Union University,

\* Institutions starred are members of the Association of American Universities.

† Added at the meeting of the Association in November of 1917.

‡ For men only.

§ For women only.

Schenectady, N.Y.; †University of Alabama, University, Ala.; \*University of California, Berkeley, Cal.; \*University of Chicago, Chicago, Ill.; University of Cincinnati, Cincinnati, Ohio; University of Colorado, Boulder, Colo.; †University of Georgia, Athens, Ga.; \*University of Illinois, Urbana, Ill.; \*University of Kansas, Lawrence, Kan.; University of Maine, Orono, Me.; \*University of Michigan, Ann Arbor, Mich.; \*University of Minnesota, Minneapolis, Minn.; \*University of Missouri, Columbia, Mo.; \*University of Nebraska, Lincoln, Neb.; University of North Carolina, Chapel Hill, N.C.; University of North Dakota, University, N.D.; †University of Oklahoma, Norman, Okla.; University of Oregon, Eugene, Ore.; \*University of Pennsylvania, Philadelphia, Pa.; University of Pittsburgh, Pittsburgh, Pa.; University of Rochester, Rochester, N.Y.; University of South Dakota, Vermillion, S.D.; †University of the South, Sewanee, Tenn.; University of Tennessee, Knoxville, Tenn.; University of Texas, Austin, Texas; University of Vermont, Burlington, Vt.; †\*University of Virginia, Charlottesville, Va.; University of Washington, Seattle, Wash.; †University of West Virginia, Morgantown, W.Va.; \*University of Wisconsin, Madison, Wis.; University of Wooster, Ohio; Vanderbilt University, Nashville, Tenn.; §Vassar College, Poughkeepsie, N.Y.; †Wabash College, Crawfordsville, Ind.; †Washburn College, Topeka, Kan.; †Washington and Jefferson College, Washington, Pa.; † †Washington and Lee University, Lexington, Va.; Washington University, St. Louis, Mo.; §Wellesley College, Wellesley, Mass.; §Wells College, Aurora, N.Y.; †Wesleyan University, Middletown, Conn.; Western Reserve University, Cleveland, Ohio; †Whitman College, Walla Walla, Wash.; †William Jewell College, Liberty, Mo.; †Williams College, Williamstown, Mass.; †Worcester Polytechnic Institute, Worcester, Mass.; \*Yale University, New Haven, Conn.

*Supplementary list of institutions admitted since Nov. 1917:* Agnes Scott College, Decatur, Ga.; Alfred University, Alfred, N.Y.; California Institute of Technology, Pasadena, Cal.; Carthage College, Carthage, Ill.; College of St. Teresa, Winona, Minn.; Davidson College, Davidson, N.C.; Denison University, Granville, Ohio; Hamline University, St. Paul, Minn.; Hunter College, New York, N.Y.; Illinois College, Jacksonville, Ill.; Illinois Woman's College, Jacksonville, Ill.; Morningside College, Sioux City, Iowa; New York State Teachers' College; North-Western College, Naperville, Ill.; Occidental College, Los Angeles, Cal.; Park College, Parkville, Mo.; Sweet Briar College, Sweet Briar, Va.; University of Arkansas, Fayetteville, Ark.; University of Florida, Gainesville, Florida; University of Idaho, Moscow, Idaho; University of Kentucky, Lexington, Ky.; University of Nevada, Reno, Nev.; University of Southern California, Los Angeles, Cal.; University of Utah, Salt Lake City, Utah; Western College for Women, Oxford, Idaho; Westminster College, New Wilmington,

\* Institutions starred are members of the Association of American Universities.

† Added at the meeting of the Association in November of 1917.

‡ For men only.

§ For women only.

Penn. ; Wheaton College, Norton, Mass. ; William and Mary College, Williamsburg, Va.

The following particulars of the 24 institutions belonging to the Assocn. of American Univs. have been kindly supplied by the American University Union in Europe, British Division. All are co-educational, except C.U.A., Clark, Harvard, Princeton, Virginia, and Yale, and even these, except C.U.A. and Princeton, admit women for graduate work. Where not otherwise stated the Fees charged at Halls of Residence or dormitories are for rooms (with heating and light) without board. Fees payable on matriculation and on graduation have not been specified. They range between \$5 and \$30. Fuller information, including particulars of equipment and research funds, library facilities, and facilities for publication of research results, is given in *Opportunities for Study at American Graduate Schools*, Bulletin, 1921, No. 6, of the United States Bureau of Education.

CALIFORNIA (founded 1868), Berkeley, Cal. (State Univ.). *President* : David P. Barrows, Ph.D., LL.D. *Deans* in the Academic Colleges : The Faculties—H. R. Hatfield, Ph.D. ; Graduate Division—A. O. Leuschner, Sc.D., Ph.D. ; Undergraduate Divn.—T. M. Putnam ; Letters and Sc.—G. D. Louderback, Ph.D. ; Agric.—T. F. Hunt, M.Sc., D.Agr. ; Mechanics—C. L. Cory, M.E., E.D. ; Mining—F. H. Probert ; Civil Engin.—C. Derleth, C.E. ; Chemistry—G. N. Lewis, A.M., Ph.D. ; Commerce—S. Daggett, A.M., Ph.D. ; Directors of Schools of Archit.—J. G. Howard ; Educn.—A. F. Lange, A.M., Ph.D. ; Jurispr.—W. C. Jones ; Vocational Educn.—R. J. Leonard.

*Library* : 400,000 vols. *Fees* : Tuition, \$150 p.a. ; Incidental, \$50 p.a. *Living Expenses in Berkeley* : Board and lodging, \$35 to \$55 p.m. *Teaching Staff* : 1127. *Students* : 12,370.

CATHOLIC UNIVERSITY OF AMERICA (founded 1889), Washington, D.C. *Rector* : Rt. Rev. T. J. Shahan, S.T.D., J.U.L., LL.D. *Deans of Faculties* : Sacred Sciences—Very Rev. C. F. Aiken, S.T.D. ; Law—P. J. McLoughlin, A.B., LL.M., J.D. ; Philosophy—F. O'Hara, Ph.D. ; Letters—P. J. Lennox, Litt.L. ; Sciences—A. E. Landry, Ph.D. ; President of Divinity Coll.—Very Rev. J. F. Fenlon, S.S., S.T.D.

*Library* : 136,000 vols. *Fees* for tuition : \$300 p.a. *Halls of Residence* : Board and room, \$48 p.m. *Teaching Staff* : 102. *Students* : 1835.

CHICAGO (founded 1891), Chicago, Ill. *President* : Harry Pratt Judson. *Deans* : Graduate School of Arts and Lit.—A. W. Small ; Ogden Graduate School of Science—R. D. Salisbury ; Colleges of Arts, Lit., and Science—D. A. Robertson ; University College—N. Butler ; Divinity School—S. Mathews ; Law School—J. P. Hall ; Medical Students—J. M. Dodson ; School of Commerce and Admn. and Graduate School of Social Service Admn.—L. C. Marshall ; College of Educn.—W. S. Gray ; School of Educn. (Director)—C. H. Judd.

*Libraries* : 700,000 vols., 3213 current periodicals. *Fees* : Tuition, \$60 a quarter. *Halls of Residence* : \$30 to \$144 a quarter. Board not less than \$7 a week. *Teaching Staff* : 377. *Students* : 11,365.

CLARK (founded 1889), Worcester, Mass. *President*: Wallace W. Atwood. *Dean of the Collegiate Dept.*: H. P. Little.

*Libraries*: 98,000 vols., 500 journals. *Fees* for tuition: \$100 p.a. *Halls of Residence* for a few male graduate students only. Furnished rooms near from \$2.50 per week. Board from \$6½. *Teaching Staff*: 60. *Students*: 532.

COLUMBIA (founded 1754), New York City. *President*: Nicholas Murray Butler, Ph.D., LL.D., D.Litt. *Deans of Faculties*: Pol. Sc., Philos., and Pure Sc.—F. J. E. Woodbridge, A.M., LL.D.; Applied Sc.—G. B. Pegram, Ph.D.; Law—H. F. Stone, A.M., LL.B., LL.D.; Medicine—W. Darrach, M.D.; Columbia College—H. E. Hawkes, Ph.D.; Barnard Coll.—Virginia C. Gildersleeve, Ph.D.; Teachers' Coll.—J. E. Russell, Ph.D., LL.D.; Coll. of Pharmacy—H. H. Rusby, M.D.

*Libraries*: 797,000 vols. *Fees*: Tuition, \$248 p.a. *Halls of Residence*: \$105 to \$400 p.a. *Teaching Staff*: 1506. *Students*: 25,734.

CORNELL (founded 1868), Ithaca, N.Y. *President*: Livingston Farrand, M.D., LL.D. *Deans of Colleges*: Medical—W. L. Niles, M.D.; Agric.—A. R. Mann, A.M.; Archit.—F. H. Bosworth; Engin.—D. S. Kimball, M.E.; Arts and Sc.—F. Thilly, Ph.D., LL.D.; Graduate School—J. E. Creighton, Ph.D., LL.D.; Faculty of Law—G. G. Bogert.

*Libraries*: 760,000 vols. and pamphlets. Over 2000 current periodicals received. *Fees* for tuition: Coll. of Arts and Sc., \$250 p.a.; Graduate School, \$100 p.a. *Teaching Staff*: 700. *Students*: 5700.

HARVARD (founded 1638), Cambridge, Mass. *President*: Abbott Lawrence Lowell, LL.D. *Deans*: Faculty of Arts and Sc.—Le Baron R. Briggs, LL.D., Litt.D.; Graduate Sch. of Arts and Sc.—C. H. Haskins, Ph.D., Litt.D.; Harvard College—C. N. Greenough, Ph.D.; Special Students (in charge of Univ. Extension)—J. H. Ropes, D.D.; Engineering Sch.—H. J. Hughes; Faculty of Archit.—C. W. Killam (acting); Graduate Sch. of Business Admn.—W. B. Donham, LL.B.; Bussey Institn.—W. M. Wheeler, Ph.D.; Faculty of Divinity—W. W. Fenn, D.D.; Faculty of Law—Roscoe Pound, Ph.D., LL.D.; Graduate Sch. of Educn.—H. W. Holmes; Medical Sch.—D. L. Edsall, M.D.; Dental Sch.—E. Hanes Smith, D.M.D.

*Libraries*: College, 1,261,800 vols. and pamphlets; Departmental, 2,101,200. *Fees*: Tuition, \$250 p.a.; Graduate School, \$35. *Halls of Residence*: \$50 to \$200 p.a. Board, \$240 to \$350 p.a. *Teaching Staff*: 891. *Students*: 7445.

ILLINOIS (founded 1868), Urbana, Ill. (State Univ.). *President*: David Kinley, Ph.D., LL.D. *Deans of Colleges*: Liberal Art and Sc.—K. C. Babcock, B.Lit., Ph.D., LL.D.; Commerce and Business Admn.—C. M. Thompson, Ph.D., LL.D.; Engineering—C. R. Richards, M.E., M.M.E., D.Eng.; Agric.—E. Davenport, M.Agr., LL.D.; Law—H. C. Jones, LL.B., S.J.D.; Graduate School—A. H. Daniels, Ph.D.; Education—C. E. Chadsey, Ph.D.; Medicine—A. C. Eycleshymer,

Ph.D., M.D.; Dentistry—F. B. Moorehead, D.D.S., M.D.; School of Pharmacy—W. B. Day, Ph.G.; Sch. of Music (Director)—F. B. Stiven, B.Mus., A.A.G.O.; Library School (Dir.)—P. L. Windsor, Ph.B.

*Library*: 462,000 vols., 52,000 pamphlets. *Fees* for tuition: \$75 p.a. *Halls of Residence*: \$108 to \$180 p.a. (single rooms); \$81 to \$150 (double). Board, \$260 to \$360 p.a. *Teaching Staff*: 1020. *Students*: 9493.

INDIANA (founded 1820), Bloomington, Ind. (State Univ.). *President*: Wm. Lowe Bryan, Ph.D., LL.D. *Deans of Schools*: Graduate School—C. H. Eigenmann, Ph.D.; Medicine—C. P. Emerson, M.D.; Education—H. Lester Smith, Ph.D.; Law—C. McG. Hepburn, A.M., LL.B., LL.D.; Commerce and Finance—W. A. Rawles, Ph.D.; Music—B. W. Merrill; College of Arts and Sc.—S. E. Stout, Ph.D., and D. A. Rothrock, Ph.D.

*Library*: 144,000 vols. *Fees*: \$42.50 a semester. *Living Expenses* in Bloomington, per week: Room, \$2 to \$5; Board, \$5 to \$7. *Teaching Staff*: 226. *Students*: 3914.

IOWA, STATE UNIV. OF (founded 1855), Iowa City. *President*: W. A. Jessup, Ph.D. *Deans of Colleges*: Liberal Arts—G. F. Kay, Ph.D.; Law—H. F. Goodrich, LL.B. (Acting Dean); Medicine—L. W. Dean, M.S., M.D., F.A.C.S.; Dentistry—F. T. Breene, D.D.S., M.D.; Pharmacy—W. J. Teeters, M.S., Ph.C.; Graduate College—C. E. Seashore, Ph.D.; Applied Sc.—W. G. Raymond, C.E., LL.D., Eng.D.; Education—W. F. Russell, Ph.D.; Commerce—C. A. Phillips, Ph.D.

*Library*: 180,000 vols. *Fees* for tuition, \$40 p.a.; Incidental, \$15 p.a. *Halls of Residence*: \$48 per quarter (single rooms); \$33 (double). Board, \$6 per week. *Teaching Staff*: 500. *Students*: 5341.

JOHNS HOPKINS (founded 1876), Baltimore, Maryland. *President*: Frank Johnson Goodnow, LL.D. *Deans of Faculties*: Medical—J. W. Williams, M.D., LL.D.; Engin.—J. B. Whitehead, Ph.D.; College—J. H. Latane, Ph.D., LL.D.

*Libraries*: 240,547 vols. *Fees* for tuition: Undergraduate, \$250 p.a.; Graduate, \$150 p.a. *Teaching Staff*: 390. *Students*: 3487.

KANSAS (founded 1866), Lawrence, Kansas (State Univ.). *Chancellor*: E. H. Lindley, Ph.D. *Deans of Schools*: Graduate School—F. W. Blackmar, Ph.D.; Engineering—P. F. Walker, M.M.E.; Law—H. W. Arant, LL.B.; Fine Arts—H. L. Butler, A.B.; Pharmacy—L. E. Sayre, Ph.M.; Medicine—M. T. Sudler, Ph.D.; Education—R. A. Kent, Ph.D.; College of Liberal Arts and Sc.—J. G. Brandt, Ph.D.

*Library*: 147,000 vols., 45,000 pamphlets, 1405 periodicals. *Fees*: Incidental, \$30 p.a. *Living Expenses* in Lawrence (average): room, \$10 p.m. Board, \$8 per week. *Teaching Staff*: 262. *Students*: 3681.

MICHIGAN (founded in 1837), Ann Arbor, Mich. (State Univ.).

*President*: Marion Leroy Burton, Ph.D., LL.D. *Deans*: Women—Myra Beach Jordan; Students—J. A. Bursley; Coll. of Lit., Sc., and Arts—J. R. Effinger, Ph.D.; Colls. of Engin. and Archit.—M. E. Cooley, LL.D.; Medical Sch.—H. Cabot, M.D.; Law Sch.—H. M. Bates, Ph.B.; Coll. of Pharmacy (acting)—E. H. Kraus, Ph.D., Sc.D.; Homœopathic Medical Sch.—W. B. Hinsdale, M.S., M.D.; Coll. of Dental Surgery—M. L. Ward, D.D.Sc.; Sch. of Educn. (acting)—A. S. Whitney, LL.D.; Graduate Sch.—A. H. Lloyd, Ph.D.

*Libraries*: 457,847 vols., 2448 periodicals. *Fees* for tuition: \$100 to \$120 p.a. *Teaching Staff*: 633. *Students*: 10,623.

MINNESOTA (founded 1868), Minneapolis, Minn. (State Univ.). *President*: L. D. Coffman, Ph.D. *Deans*: College of Sc., Lit., and Arts—J. B. Johnson, Ph.D.; Coll. of Engin. and Archit. and Sch. of Chem.—O. M. Leland, B.S., C.E.; Dept. of Agric.—W. C. Coffey, M.S.; Coll. of Agric., Forestry, and Home Econ.—E. M. Freeman, Ph.D.; Law Sch.—E. Fraser, LL.B.; Medical Sch.—E. P. Lyon, Ph.D., M.D.; Coll. of Dentistry—A. Owre, M.D., C.M., D.M.D.; Sch. of Mines—W. R. Appleby, M.A.; Coll. of Pharmacy—F. J. Wulling, Ph.D., LL.M.; Coll. of Educn.—M. E. Haggerty, Ph.D.; Graduate Sch.—G. S. Ford, Ph.D.; Sch. of Business—G. W. Dowrie, Ph.D.

*Library*: 370,000 vols. *Fees* per quarter for tuition: Coll. of Sc., Lit., and Arts, \$30; Graduate Sch., \$10. *Living Expenses* in Minneapolis: Rooms, \$9 to \$15 p.m. (double); \$12 to \$18 (single). Board, \$5 to \$8 per week. *Teaching Staff*: 175. *Students*: 8200.

MISSOURI (founded 1839), Columbia, Mo. (State Univ.). *President*: John C. Jones, LL.D. *Deans of Faculties*: Education—J. H. Coursault, Ph.D.; Business and Public Admn.—I. Loeb, M.S., LL.B., Ph.D.; Law—J. P. McBaine, LL.B.; Engineering—E. J. McCaustland, C.E., M.C.E.; Graduate Faculty—W. Miller, LL.D.; Agric.—F. B. Mumford, B.S., M.S.; Medicine—G. L. Noyes, M.D.; Journalism—W. Williams, LL.D.; Director of Sch. of Mines and Metallurgy—C. H. Fulton, E.M., D.Sc.

*Library*: 178,000 vols., 21,000 pamphlets, 1400 periodicals. *Fees* for tuition, \$10 per term. Graduate work only in Graduate school free. Incidental Fee, \$25 per term. *Living Expenses* in Columbia: Board, \$5 to \$8 per week. Room, \$14 to \$50 per term (16 weeks). *Teaching Staff*: 289; *Students*: 5300.

NEBRASKA (founded 1869), Lincoln, Neb. (State Univ.). *Chancellor*: S. Avery, Ph.D., LL.D.; *Deans of Colleges*: The Graduate Coll.—L. A. Sherman, Ph.D., LL.D.; Agric.—E. A. Burnett, D.Sc.; Medicine—I. S. Cutter, M.D.; Pharmacy—R. A. Lyman, A.M., M.D.; Engin.—O. J. Ferguson, M.E.E.; Arts and Sc.—P. M. Buck, A.M.; Business Admn.—J. E. Le Rossignol, Ph.D.; Dentistry—W. C. Davis, M.D., D.D.S.; Law—W. A. Seaver, LL.B.; Director of Sch. of Fine Arts—P. H. Grummann, A.M.; Prin. of Sch. of Agric.—H. E. Bradford, A.M.

*Library*: 150,000 vols., 600 periodicals. *Fees*: Incidental Fee, \$5 per semester. *Living Expenses* in Lincoln: Rooms, \$8 to \$15 p.m. Board, \$6 per week. *Teaching Staff*: 337. *Students*: 7121.

NORTHWESTERN (founded 1855), Evanston, Ill. *President*: Walter Dill Scott, Ph.D., LL.D. *Deans of Schools*: Graduate School—J. A. James, Ph.D., LL.D.; Medical—A. I. Kendall, Ph.D., Dr.P.H.; Law—J. H. Wigmore, M.A., LL.B., LL.D.; Dental—A. D. Black, M.A., M.D., D.D.S., D.Sc.; Music—P. C. Lutkin, Mus.D., A.G.O.; Commerce—R. E. Heilman, Ph.D.; Speech—R. B. Dennis, M.A.; College of Liberal Arts—R. C. Flickinger, Ph.D.; Coll. of Engineering (Director)—J. F. Hayford, C.E., D.Sc.; Educn. (Dir.)—E. E. Jones, Ph.D.; Medill School of Journalism (Dir.)—H. F. Harrington, M.A.

*Library*: 132,000 vols.; 103,000 pamphlets. *Fees* for tuition: Undergraduate, \$100 per semester; Graduate not more than \$75 p.a. *Halls of Residence*: \$115 to \$200 p.a. *Teaching staff*: 553. *Students*: 7752.

OHIO STATE UNIV. (founded 1870), Columbus, Ohio. *President*: Wm. Oxley Thompson, D.D., LL.D. *Deans of Colleges*: Agriculture—A. Vivian, Ph.G.; Arts, Philos., and Sc.—W. E. Henderson, A.M., Ph.D.; Commerce and Journalism—J. E. Hagerty, Ph.D.; Education—G. F. Arps, A.M., Ph.D.; Engineering—E. A. Hitchcock; Graduate School—W. McPherson, M.Sc., D.Sc., Ph.D.

*Library*: 225,000 vols. *Fees* for tuition: \$35 per quarter; Incidental, \$15 per quarter. *Living Expenses*: Furnished rooms, \$10 to \$15 p.m. Board, \$6.50 to \$8 per week. *Teaching Staff*: 569. *Students*: 8313.

PENNSYLVANIA (founded 1740), Philadelphia, Pa. *Provost* (acting): J. H. Penniman, Ph.D., LL.D. *Deans of Faculties*: College—A. H. Quinn, Ph.D., Litt.D.; Towne Scientific Sch.—J. Frazer, Ph.D.; Wharton Sch.—E. R. Johnson, Ph.D., Sc.D.; Educn.—J. H. Minnick, Ph.D.; Fine Arts—W. P. Laird, Sc.D.; Graduate Sch.—H. V. Ames, Ph.D.; Medicine—W. Pepper, M.D.; Law—W. E. Mikell, LL.D.; Dentistry—C. R. Turner, M.D.; Vet. Med.—L. A. Klein, V.M.D.; Graduate Sch. of Med.—G. H. Meeker, Ph.D., LL.D.

*Libraries*: 500,000 vols., 50,000 pamphlets. *Fees* for tuition: \$250. *Halls of Residence*: Board and lodging from \$350 p.a. *Teachers*: 964. *Students*: 11,182.

PRINCETON (founded in 1747), Princeton, N.J. *President*: J. G. Hibben, Ph.D., LL.D., Litt.D. *Deans*: Graduate School—A. F. West, Ph.D., LL.D.; Depts. of Science—H. B. Fine, Ph.D., LL.D.; Faculty—W. F. Magie, Ph.D., LL.D.; College—H. McClenahan, LL.D.; Sch. of Engin.—A. M. Greene, D.Sc.

*Libraries*: 469,506 vols., 106,093 periodicals and pamphlets. *Fees* for tuition: \$300. *Halls of Residence*: \$60 to \$300 p.a. Board, \$288 p.a. *Teachers*: 213. *Students*: 1967.

STANFORD (founded 1891), California. *President*: Ray Lyman Wilbur. *Deans*: Men—G. B. Culver; Women—Mary Yost; School of Educn.—E. P. Cubberley; Law Sch.—C. A. Huston; Sch. of Medicine—W. Ophuls; Graduate Study—E. C. Franklin.

*Libraries*: 350,000 vols. *Fees* per quarter for tuition: Undergraduate, \$75; Graduate, \$50; Incidental (undergrads.), \$20.



*Halls of Residence*: \$16.50 to \$27 per quarter. Board, \$30 to \$40 p.m. *Teaching Staff*: 280. *Students*: 2500.

UNIVERSITY OF VIRGINIA (founded in 1819), Charlottesville, Va. (State Univ.). *President*: E. A. Alderman, D.C.L., LL.D. *Deans of Departments*: Univ. and College—J. M. Page, Ph.D., LL.D.; Graduate Studies—R. H. Dabney, Ph.D.; Law—W. M. Lile, LL.D.; Med.—T. Hough, Ph.D.; Engin.—W. M. Thornton, LL.D.; Educn.—J. L. Manahan, Ph.D.; Summer Quarter—C. G. Maphis; Women—Adelaide Douglas Simpson.

*Libraries*: 90,000 vols. *Fees per annum*: University, \$40; tuition, \$160. *Halls of Residence*: \$60 to \$95 p.a. Board, \$20 to \$30 p.m. *Teaching Staff*: 100. *Students*: 3546.

WISCONSIN (founded 1849), Madison, Wis. (State Univ.). *President*: E. A. Birge, Ph.D., Sc.D., LL.D. *Deans of Colleges*: Letters and Sc.—G. C. Sellery, Ph.D., LL.D.; Engineering—F. E. Turneure, C.E., Dr.Engr.; Agric.—H. L. Russell, Ph.D.; Law School—H. S. Richards, Ph.B., LL.B., LL.D.; Medical Sch.—C. R. Bardeen, M.D.; Graduate Sch.—C. S. Slichter, Sc.D.

*Library*: 644,000 vols., 338,000 pamphlets. *Fees per semester*: for tuition, \$62; incidental, \$15. *Living Expenses* in Madison: Room, \$4 to \$6 a week (single), \$3 to \$4.50 (double). Board, \$6.50 to \$9 a week. *Teaching Staff*: 991. *Students*: 10,370.

YALE (founded 1701), New Haven, Conn. *President*: J. R. Angell, Litt.D., LL.D. *Deans of Schools*: Graduate School—W. L. Cross, Ph.D., Litt.D.; Med.—M. C. Winternitz, M.D.; Divinity—Rev. C. R. Brown, LL.D.; Law—T. W. Swan, M.A.; Fine Arts—W. S. Kendall, M.A.; Music—D. S. Smith, Mus.D.; Forestry—J. W. Toumey, Sc.D.; Yale College—F. S. Jones, LL.D.

*Libraries*: 1,250,000 vols., 9000 periodicals. *Fees for tuition*: Undergraduate, \$300; Graduate, \$200 p.a. *Halls of Residence*: \$100 to \$330 p.a. *Teaching Staff*: 587. *Students*: 3820.

## XXVI

### CONFERENCE OF SWISS AND BRITISH UNIVERSITIES

HELD AT BASLE, AUGUST 21 TO 23, 1922

All the seven Swiss Universities were represented.

Representatives of British Universities : Birmingham, Prof. F. E. Sandbach ; Bristol, Prof. F. Boillot ; Cambridge, Sir Geoffrey Butler, K.B.E. ; Trinity College, Dublin, Mr. Walter Starkie ; Edinburgh, Prof. Sir Richard Lodge and Prof. J. Mackinnon ; National of Ireland, Rev. J. Hynes ; Leeds, Dr. C. E. Gough ; London, Mr. A. C. Ford, M.B.E. ; Manchester, Sir Henry A. Miers, Vice-Chancellor, and Prof. T. F. Tout ; Oxford, Dr. L. R. Farnell, Vice-Chancellor, and Dr. F. W. Pember, Warden of All Souls ; St. Andrews, Prof. J. E. A. Steggall ; Wales, Prof. W. H. Young.

The Universities Bureau was represented by the Assistant-Secretary, Mr. W. H. Dawson.

All the visitors were the guests of members of the University of Basle or other residents.

On the evening of Monday, August 21, members of the Conference and their hosts were received by Colonel Isaac Iselin, Honorary President of the Conference, in his house overlooking the Rhine.

The sessions of the Conference were held in the Great Hall of the University.

In his opening address the Rector, who presided, dwelt on the close ecclesiastical and educational relations of Britain and Switzerland in the 16th and 17th centuries, and expressed the desire of the Swiss Universities to revive them by facilitating an interchange of academic study.

The Vice-Chancellor of Oxford, as the mouthpiece of his British colleagues, recalled the spiritual unity of Europe in the Middle Ages, with its wandering teachers and students, and the close intellectual community of the period of the Renaissance. He instanced the classic example of Erasmus, the cosmopolitan scholar, whose work was closely associated with Basle. In more modern times an accentuated nationalism and the diversity of University training and examinations had militated to some extent against this cosmopolitan University life. The problem of the Conference was how to revive and facilitate it, as far as Britain and Switzerland are concerned.

**MATRICULATION.** Dealing with the first subject on the tractanda, the Chairman (the Rector of Basle) described the conditions of admission

into a Swiss University. There are three types of requirement—(a) an examination including Latin and Greek, giving admission to all faculties; (b) an examination including Latin and two modern languages, giving admission to all faculties, with the exception of Theology; (c) an examination including two modern languages and mathematics of a higher standard, admitting to the faculty of Science and to certain of the courses leading to a degree in Arts. The British delegates explained the system in force in British Universities and its variants. The Chairman assumed that British Universities would be willing to exempt from entrance examinations Swiss students who have qualified in tests (a) or (b), and hoped that test (c) would be accepted *pro tanto*. He suggested that, in applying tests to Swiss students, British Universities should make allowance for their being in strange surroundings. The Swiss delegates assured their British colleagues that any examination qualifying for entrance to a British University would be deemed valid in Switzerland. After a long discussion and the submission of various proposals for mutual recognition of admission tests, it was agreed

That it is desirable that each University should separately invite all the Universities of the other country severally to accept its entrance tests.

In regard to postgraduate study, there was a consensus of opinion that it was in this connexion that an interchange of students is most desirable and most likely to prove fruitful. British delegates described to their Swiss colleagues the conditions of admission to and regulations connected with courses of study for the Ph.D. degree, and explained that there would be no difficulty in determining and recognizing the preliminary qualifications of Swiss graduates who desire to follow postgraduate courses of advanced study in Britain. Similarly, although the Swiss Universities, in view of the superior importance of the final State examinations, do not lay such stress as we do on the possession of a University degree, provision is made for advanced study in a variety of subjects.

THE COUNTING OF TERMS KEPT AT A FOREIGN UNIVERSITY. This subject was introduced by Professor Boillot, who stated that British Universities generally agree that study in foreign universities is beneficial after graduation, but not before, except as regards modern languages. In certain cases students of modern languages are allowed to count study at a foreign University as part of the course for a degree. At Edinburgh, for example, students who in the Ordinary Course reach at the end of the second term the standard of a Second Class certificate may be exempted from attendance during the third term, on the understanding that they spend it abroad. Some Universities specify the foreign University at which such study is to take place. Bristol and Liverpool pay the foreign University fees, Sheffield and Leeds contribute towards the expenses of study abroad.

Professor Martin (Geneva) agreed with the British view that study abroad should ordinarily occur after graduation. The Swiss Universities are more liberal than the British in allowing temporary migration.

They require their students to spend a fixed number of semesters, or sessions, before taking a degree or passing the final State examination ; but they may spend these sessions at any Swiss University and even count a number of terms spent at a foreign University. The division of the academic year into " terms " in Britain and into " semesters " in Switzerland makes such recognition difficult unless a complete academic year be taken.

After the conclusion of the afternoon session the delegates were invited to take tea at the house of the Rector of the University.

THE MUTUAL RECOGNITION OF UNIVERSITY EXAMINATIONS AND DEGREES. Dr. Farnell thought it possible that Oxford and the General Medical Council might consider a suggestion that a Swiss student who had in his own University gone through all the courses corresponding with those for the Oxford B.M. should be allowed to enter the course for the D.M.

Sir Geoffrey Butler laid emphasis on the fact that, as so much depended upon the personal supervision of the students' studies, it would be mistaken for Universities to accept postgraduate students in subjects for which they possessed on the staff no appropriate expert. To this end they should endeavour to avoid a cut-throat policy between the different Universities, and efforts should be made as much as possible to put the applicant in touch with the right professor.

Sir Richard Lodge said that the Edinburgh Ph.D. regulations were more lenient, the ordinary practice being to allow at least one year out of the prescribed two to be spent elsewhere, the work being supervised from Edinburgh.

Sir Henry Miers said that the Manchester regulations for advanced study are almost the same as the Scottish. It ought to be generally recognized that the student's choice of a University in which to pursue his researches is very important. In most cases he would probably wish to work under a particular professor. The second year, or part of it, is allowed to be spent elsewhere. He laid stress on the training in research methods given at Manchester to Ph.D. students.

Professor Tout insisted on the substantial uniformity of the conditions for obtaining the Ph.D. in all the British Universities. The establishment of the Ph.D. was the first achievement of the British Universities acting in co-operation. The main factors which should determine the student's choice of a University are (1) the professor, (2) the materials. Facility of migration is essential : *e.g.* Manchester History students are regularly sent to London for their last year, arrangements being made for their work being supervised and guided there. In such matters regulations should be very elastic, but there should be no laxity in regard to excluding inadequately prepared students or accepting them for work on subjects in which the University has not adequate resources. The Ph.D. system is still experimental, but one point which is abundantly clear is that the idea of giving the degree for a mere thesis is anathema.

Professor H. K. Corning (Basle) remarked that a good many foreigners, especially Russians, came to Switzerland for a M.D. degree,

which they can obtain in  $3\frac{1}{2}$  years. The Swiss student, whose courses for the State medical diploma cover 4 years, is not likely to aspire to a British degree.

In answer to a question it was stated that Geneva has a few scholarships for research available in England.

The subject of *Interchange of Teachers* was then discussed. Professor Bonnard (Lausanne) asked whether Switzerland could not be included in the scheme for providing "assistants" in secondary schools.

The subject of *Vacation Courses* was not formally raised, but in conversation Professor Dürr (copies of whose prospectus of the Basle University vacation course were on the table) expressed the hope that British Universities would next year bring the Basle course to the notice of their students.

On the Tuesday evening the representatives attended a banquet at the Somer Kasino. Among the speeches specially applauded were one by Sir Richard Lodge in which he paid a tribute to the steadfastness of the Swiss in holding together notwithstanding their differences in language and religion, thus affording an example and rallying-point for the forces opposed to excessive separatism in politics which now threaten to lead to anarchy; another by Professor Boillot in which he praised the kindness shown by the Swiss to the French prisoners of war at the time when they were being repatriated; and one by a social-democratic Regierungsrat.

The banquet was followed by a Latin address purporting to be by the Shade of a Roman of the Augustan age. This incident was most happily conceived, and carried out in a manner fully in keeping with the reputation of the Baslois for appreciation of art. Copies of the address, beautifully printed, were handed to the guests.

On the afternoon of Wednesday an excursion to the Roman remains at Augst was conducted by Professor Staehelin. The party was entertained by Mr. and Mrs. Clavel-Simonius at their country house, decorated in the ancient Roman style in keeping with the associations of the place.

In the evening there was a reception given by Prof. and Mrs. Wackernagel-Stehlin at their house.

From all their hosts the delegates received the most generous and kindly hospitality. "I think all the British delegates would agree," wrote one of them, "that it is impossible to exaggerate the charm and hospitality of our Baslois friends."

## XXVII

### I. DISTRIBUTION OF GROUPS OF SUBJECTS IN THE UNIVERSITIES AND UNIVERSITY COLLEGES OF THE UNITED KINGDOM

#### SCHOOLS OF THEOLOGY

BIRMINGHAM, [Handsworth (Wesleyan) and Lichfield (Church of England) Theological Colls.]; BRISTOL, [Associated Colls.]; CAMBRIDGE; DURHAM; LEEDS, [Coll. of the Resurrection, Mirfield]; LIVERPOOL, [St. Aidan's Coll., Birkenhead]; LONDON, [New Coll., Hampstead (Congregational), Hackney Coll., Hampstead (Congregational), Regent's Park Coll. (Baptist), King's Coll. Theological Department (Church of England), Wesleyan Coll., Richmond, St. John's Hall, Highbury (Church of England)]; MANCHESTER; OXFORD; WALES, [Univ. Coll., Bangor (Baptist Coll., Bangor, Independent Coll., Bangor, Church Hostel, Bangor), The Associated Theological Colls.]. ABERDEEN; EDINBURGH; GLASGOW; ST. ANDREWS. TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [St. Patrick's Coll., Maynooth].

#### SCHOOLS OF LAW

CAMBRIDGE; LEEDS; LIVERPOOL; LONDON, [University Coll., King's Coll. and the School of Economics, jointly]; MANCHESTER; OXFORD; SHEFFIELD; WALES, [Univ. Coll., Aberystwyth]. ABERDEEN; EDINBURGH; GLASGOW. BELFAST; TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [Univ. Colls. of Dublin, Cork, and Galway].

#### SCHOOLS OF MEDICINE

BIRMINGHAM; BRISTOL; CAMBRIDGE; DURHAM, [College of Medicine, Newcastle]; LEEDS; LIVERPOOL; LONDON, [St. Bartholomew's Hospl., St. Thomas's Hospl., Westminster Hospl., Guy's Hospl., St. George's Hospl., London Hospl., Middlesex Hospl., Charing Cross Hospl., London (Royal Free Hospl.) Sch. of Med. for Women, University Coll. and University Coll. Hospl., King's Coll. and King's Coll. Hospl., St. Mary's Hospl., London School of Tropical Med., Lister Institute of Preventive Med., Royal Army Medical Coll., Royal Naval Coll. (Greenwich)]; MANCHESTER; OXFORD; SHEFFIELD; WALES, [Welsh National School of Med., Cardiff]. ABERDEEN; EDINBURGH; GLASGOW; ST. ANDREWS. BELFAST; TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [Univ. Colls. of Dublin, Cork, and Galway].

#### SCHOOLS OF DENTAL SCIENCE

BIRMINGHAM; BRISTOL; DURHAM [College of Medicine, Newcastle, and Newcastle Dental Hospl.]; LEEDS; LIVERPOOL; LONDON [St. Bartholomew's Hospl., Westminster Hospl., Guy's Hospl., St. George's

Hospl., London Hospl., Middlesex Hospl., Charing Cross Hospl., King's Coll. and King's Coll. Hospl., St. Mary's Hospl., London School of Dental Surgery, University Coll. Medical School, Dental Department]; MANCHESTER; SHEFFIELD. BELFAST; TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [Univ. Colls. of Dublin and Cork].

#### SCHOOLS OF VETERINARY SCIENCE

LIVERPOOL; LONDON, [Royal Veterinary Coll.]. EDINBURGH, [Royal (Dick) Veterinary Coll.].

#### SCHOOL OF PHARMACY

GLASGOW [Royal Technical Coll.].

#### SCHOOLS OF MUSIC

BIRMINGHAM; CAMBRIDGE; LONDON, [Royal Academy, Royal College, Trinity College]; MANCHESTER, [Royal Manchester Coll. of Music]; OXFORD; WALES, [Univ. Colls. of Aberystwyth, Bangor, and Cardiff]; Univ. Coll., Nottingham; Univ. Coll., Reading; Univ. Coll., Southampton. EDINBURGH. TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [Univ. Coll., Dublin, University Coll., Cork].

#### SCHOOLS OF ART

DURHAM, [Armstrong Coll.]; LONDON, [University Coll.—Slade School], Goldsmiths' Coll.; OXFORD; Univ. Coll., Reading. ABERDEEN; EDINBURGH.

*Art of the Theatre.* LIVERPOOL.

*Civic Art and Design, and Town Planning.* BIRMINGHAM; LIVERPOOL; LONDON, [University Coll.—Bartlett School]; SHEFFIELD.

*Ecclesiastical Art.* LONDON, [King's Coll.].

#### SCHOOLS OF ARCHITECTURE

CAMBRIDGE; DURHAM, [Armstrong Coll.]; LIVERPOOL; LONDON, [Univ. Coll.—Bartlett School]; MANCHESTER; SHEFFIELD. BELFAST, [Municipal Coll. of Technology]; NATIONAL OF IRELAND, [Univ. Coll., Dublin].

*Naval Architecture and Marine Engineering.* DURHAM, [Armstrong College]; LIVERPOOL. GLASGOW. BELFAST.

#### SCHOOL OF JOURNALISM

LONDON, [University Coll., King's Coll. and School of Economics, jointly].

#### SCHOOL OF LIBRARIANSHIP

LONDON, [University Coll.].

#### SCHOOLS OF COMMERCIAL SCIENCE

BIRMINGHAM; DURHAM, [Armstrong Coll.]; LIVERPOOL; LONDON, [School of Economics]; MANCHESTER; Univ. Coll., Nottingham;

Univ. Coll., Reading; Univ. Coll., Southampton. ABERDEEN; EDINBURGH. BELFAST; NATIONAL OF IRELAND, [Univ. Colls. of Dublin, Cork, and Galway].

### SCHOOLS OF ENGINEERING

All English Universities; Univ. Colls. of Cardiff, Swansea, Nottingham, and Southampton. EDINBURGH; GLASGOW; ST. ANDREWS, [Univ. Coll., Dundee]. BELFAST, [Municipal Coll. of Technology]; TRINITY COLLEGE, DUBLIN; NATIONAL OF IRELAND, [Univ. Colls. of Dublin, Cork, and Galway].

### SCHOOLS OF METALLURGY

BIRMINGHAM; CAMBRIDGE; DURHAM, [Armstrong Coll.]; LEEDS; LIVERPOOL; LONDON, [Imperial Coll.]; MANCHESTER; SHEFFIELD (*including Non-ferrous Metals*); WALES, [Univ. Colls. of Cardiff and Swansea]. EDINBURGH, [Heriot-Watt Coll.]; GLASGOW, [Royal Technical Coll.].

### SCHOOLS OF MINING

BIRMINGHAM; DURHAM [Armstrong Coll.]; LEEDS; LONDON, [Imperial Coll.]; MANCHESTER; SHEFFIELD; WALES, [Univ. Coll., Cardiff]; Univ. Coll., Nottingham. EDINBURGH, [Heriot-Watt Coll.]; GLASGOW, [Royal Technical Coll.].

*Mining and Technology of Petroleum.* BIRMINGHAM; LONDON, [Imperial Coll.].

*Mining Geology.* LONDON, [Imperial Coll.].

### SCHOOLS OF AGRICULTURE, FORESTRY, HORTICULTURE, AND ESTATE MANAGEMENT

BRISTOL, [Royal Agric. Coll., Cirencester and National Fruit and Cider Institute, Long Ashton]; CAMBRIDGE; DURHAM, [Armstrong Coll.]; LEEDS; LONDON, [Rothamsted-Lawes Agricultural Trust, South-Eastern Agricultural Coll., Wye]; OXFORD; WALES, [Univ. Colls. of Aberystwyth and Bangor]; Univ. Coll., Nottingham [in conjunction with Midland Agric. Coll.]; Univ. Coll., Reading. ABERDEEN; EDINBURGH; GLASGOW, [West of Scotland Agricultural Coll.]. Royal College of Science for Ireland.

*Tropical Agriculture.* CAMBRIDGE.

*Forestry.* CAMBRIDGE; OXFORD; WALES, [Univ. Coll., Bangor]. ABERDEEN; EDINBURGH.

*Horticulture.* CAMBRIDGE; Univ. Coll., Reading.

*Dairying.* Univ. Coll., Reading.

### SCHOOLS OF EDUCATION AND TRAINING COLLEGES

All Universities and University Colleges.

*Training of Teachers for the Deaf.* MANCHESTER.



## II. DISTRIBUTION OF SUBJECTS OF STUDY TO WHICH EXCEPTIONAL ATTENTION IS GIVEN IN CERTAIN OF THE UNIVER- SITIES AND UNIVERSITY COLLEGES OF THE UNITED KINGDOM

(The omission of the name of a University or College from under any of the following subject-headings is not to be taken as an indication that the subject is not studied.)

Subjects generally provided for in Schools of Theology, Law, Medicine, etc., or ordinarily recognized as branches of the following departments of knowledge are omitted from these lists, viz. : Economics ; English Language and Literature ; History, ancient, mediæval, and modern ; Logic ; Mathematics ; Philology ; Philosophy, mental and moral ; Phonetics ; Anatomy, human and comparative ; Astronomy ; Botany ; Biology ; Chemistry, inorganic, organic, physical, physiological (biochemistry), technical ; Embryology ; Geography ; Geology ; Histology ; Mineralogy ; Morphology ; Palæontology ; Pathology ; Physics ; Physiology ; Psychology ; Zoology.

### ARTS

*Anthropology, including Primitive Technology and Archæology* : BIRMINGHAM ; CAMBRIDGE ; LONDON, [University Coll.] ; OXFORD. EDINBURGH. NATIONAL OF IRELAND, [Univ. Coll., Dublin]. (Vide also Ethnology.)

*Archæology, Assyrian and Babylonian* : LIVERPOOL ; LONDON, [University Coll.] ; OXFORD.

„ *Celtic* : NATIONAL OF IRELAND, [The Univ. Colls.].

„ *Central American* : LIVERPOOL.

„ *Classical* : CAMBRIDGE ; LIVERPOOL ; LONDON, [University Coll.] ; OXFORD. TRINITY COLLEGE, DUBLIN.

„ *Cretan* : Oxford.

„ *Egyptian* : LIVERPOOL ; LONDON, [University Coll.] ; MANCHESTER ; OXFORD.

„ *Numismatics* : CAMBRIDGE ; LIVERPOOL ; OXFORD.

*Astronomy* : CAMBRIDGE ; LIVERPOOL ; OXFORD. EDINBURGH ; GLASGOW. TRINITY COLLEGE, DUBLIN.

*Astro-physics* : CAMBRIDGE ; LONDON, [Imperial Coll.].

*History, American* : OXFORD.

„ *British Dominions* : CAMBRIDGE ; LONDON, [King's College] ; MANCHESTER ; OXFORD ; WALES, [Univ. Coll., Aberystwyth].

„ *Byzantine* : LONDON, [King's Coll.] ; OXFORD.

„ *Central European* : LONDON, [King's Coll.].

„ *French, and Institutions* : CAMBRIDGE ; LONDON ; MANCHESTER.

„ *Indian, and Economics* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD. EDINBURGH.

„ *Irish* : MANCHESTER. NATIONAL OF IRELAND, [The Univ. Colls.].

„ *of London* : LONDON, [University Coll.].

*History, Military* : OXFORD ; LONDON, [University Coll.].

„ *Naval* : CAMBRIDGE.

„ *Russian* : LIVERPOOL ; LONDON, [King's Coll.].

„ *Scottish* : EDINBURGH ; GLASGOW.

*Palæography, Diplomatic and Papyrology, Bibliography* : CAMBRIDGE ; LIVERPOOL ; LONDON, [University and King's Colls.] ; MANCHESTER ; OXFORD. EDINBURGH.

*Poetry* : OXFORD.

*Political Science* : CAMBRIDGE ; LONDON, [School of Economics] ; OXFORD ; WALES, [Univ. Coll., Aberystwyth]. EDINBURGH ; GLASGOW.

*Public Administration and Finance* : LONDON, [School of Economics] ; MANCHESTER.

*Public Reading and Speaking* : DURHAM. ABERDEEN ; EDINBURGH. TRINITY COLLEGE, DUBLIN.

*Solar Physics* : CAMBRIDGE.

LANGUAGES AND LITERATURE (omitting those which are studied in the large majority of Universities and Colleges, viz., Hebrew including Aramaic and Syriac, Greek, Latin, French, German, Italian, Russian, and Spanish).

*Amharic* : LONDON, [School of Oriental Studies].

*Anglo-Saxon* : CAMBRIDGE ; LONDON, [Univ. Coll.] ; OXFORD ; TRINITY COLLEGE, DUBLIN.

*Arabic* : BRISTOL ; CAMBRIDGE ; LONDON, [School of Oriental Studies ; MANCHESTER ; OXFORD ; WALES, [Univ. Coll., Aberystwyth]. EDINBURGH ; GLASGOW. TRINITY COLLEGE, DUBLIN.

*Armenian* : LONDON, [School of Oriental Studies].

*Assamese* : LONDON, [School of Oriental Studies].

*Bantu* : CAMBRIDGE ; LONDON, [School of Oriental Studies].

*Bengali* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD.

*Burmese* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD.

*Celtic* : LONDON, [University Coll.] ; OXFORD. ABERDEEN ; EDINBURGH ; GLASGOW. BELFAST ; TRINITY COLLEGE, DUBLIN.

*Chinese* : CAMBRIDGE ; LIVERPOOL ; LONDON, [School of Oriental Studies] ; MANCHESTER ; OXFORD.

*Dravidian Languages* : LONDON, [School of Oriental Studies].

*Dutch* : LONDON, [Univ. Coll. and Bedford Coll., jointly].

*Ethiopic* : LONDON, [School of Oriental Studies].

*Greek, Mediæval and Modern* : LONDON, [King's Coll.].

„ *Byzantine, and Modern* : OXFORD.

*Gujerati* : LONDON, [School of Oriental Studies].

*Hausa* : CAMBRIDGE ; LONDON, [School of Oriental Studies].

*Hindustani* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD. TRINITY COLLEGE, DUBLIN.

- Irish* : TRINITY COLLEGE, DUBLIN ; NATIONAL OF IRELAND, [The Univ. Colls.].
- Japanese* : LONDON, [School of Oriental Studies].
- Kashmiri* : LONDON, [School of Oriental Studies].
- Malay* : LONDON, [School of Oriental Studies].
- Marathi* : CAMBRIDGE ; LONDON, [School of Oriental Studies].
- Melanesian* : LONDON, [School of Oriental Studies].
- Nepali* : LONDON, [School of Oriental Studies].
- Pali* : CAMBRIDGE ; LONDON, [School of Oriental Studies].
- Persian* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD. TRINITY COLLEGE, DUBLIN.
- Polynesian* : LONDON, [School of Oriental Studies].
- Portuguese* : CAMBRIDGE ; LONDON, [King's College] ; Univ. Coll., Nottingham.
- Rhæto-Romance* : CAMBRIDGE.
- Rumanian* : CAMBRIDGE ; LONDON, [King's College].
- Sanskrit* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD ; EDINBURGH. TRINITY COLLEGE, DUBLIN.
- Scandinavian Languages*—*Danish, Norwegian, Swedish, Icelandic* : CAMBRIDGE ; LONDON, [University Coll.] ; OXFORD.
- Siamese* : LONDON, [School of Oriental Studies].
- Sinhalese, Tamil, and Telugu* : CAMBRIDGE ; LONDON, [School of Oriental Studies] ; OXFORD.
- Slavonic Languages, other than Russian* : CAMBRIDGE ; LONDON, [King's Coll.] ; Univ. Coll., Nottingham.
- Slavonic Philology, Comparative* : LONDON, [King's Coll.].
- Swahili* : CAMBRIDGE ; LONDON, [School of Oriental Studies].
- Talmudic* : CAMBRIDGE.
- Tibetan* : LONDON, [School of Oriental Studies].
- Turkish* : CAMBRIDGE ; LONDON, [School of Oriental Studies].
- Welsh* : LIVERPOOL ; WALES, [the 4 Univ. Colls.].
- Yoruba* : LONDON, [School of Oriental Studies].
- Comparative Philology* : CAMBRIDGE ; LONDON, [University Coll., King's Coll., School of Oriental Studies] ; OXFORD. ABERDEEN ; EDINBURGH ; GLASGOW. TRINITY COLLEGE, DUBLIN.
- Imperial Latin* : MANCHESTER.
- Phonetics* : LONDON, [University Coll.] ; Univ. Coll., Nottingham.

# SCIENCE, APPLIED SCIENCE, COMMERCE, SOCIOLOGY

- Aero-dynamics* : LONDON, [Imperial Coll.].
- Aviation and Aero-Engineering* : CAMBRIDGE ; LONDON, Imperial Coll., East London Coll.

*Colloidal Chemistry*: BRISTOL.

*Cytology*: LIVERPOOL.

*Economic Entomology*: LIVERPOOL; LONDON, [Imperial Coll.]. EDINBURGH.

*Ethnology and Social Anthropology*: CAMBRIDGE; LIVERPOOL; LONDON, [School of Econ., University Coll.]; OXFORD.

*Eugenics*: LONDON, [University Coll.].

*Genetics*: CAMBRIDGE; OXFORD. EDINBURGH.

*Geodesy*: CAMBRIDGE.

*Meteorology*: CAMBRIDGE; LONDON, [Imperial Coll.]; OXFORD.

*Military Science*: BRISTOL; CAMBRIDGE; DURHAM; LONDON; OXFORD; Univ. Coll., Nottingham.

*Oceanography and Fisheries*: LIVERPOOL; WALES, [Univ. Coll., Aberystwyth]. ABERDEEN.

*Physiology of Animal Nutrition*: CAMBRIDGE. ABERDEEN.

*Plant Pathology*: LONDON, [Imperial Coll.].

*Protozoology*: LONDON, [Lister Institute, King's Coll.]. EDINBURGH.

*Psychology, Comparative*: ABERDEEN.

„ *Experimental*: CAMBRIDGE; LONDON, [University Coll., King's Coll., Bedford Coll.]; MANCHESTER. EDINBURGH; GLASGOW.

„ *Industrial*: LONDON, [School of Economics].

*Railway Economics*: MANCHESTER; LONDON, [School of Economics].

*Spectroscopy*: LONDON, [Imperial Coll., King's Coll.]; OXFORD.

*Statistics*: CAMBRIDGE; LONDON, [University Coll., School of Economics]. ABERDEEN; EDINBURGH.

*Sociology*: LONDON, [School of Economics]; LIVERPOOL.

*Social Study*: BIRMINGHAM; LEEDS. EDINBURGH; GLASGOW; ST. ANDREWS, [Univ. Coll., Dundee].

*Household Science*: LONDON, [King's Coll. Household and Social Sci. Dept.]; WALES, [Univ. Coll., Aberystwyth]; Univ. Coll., Reading.

## LAW

*Law, International*: CAMBRIDGE; LIVERPOOL; LONDON, [School of Economics]; OXFORD. ABERDEEN; EDINBURGH; GLASGOW.

„ *Commercial*: LONDON, [School of Economics].

„ *Comparative*: LONDON, [University Coll.].

„ *Indian*: CAMBRIDGE; LONDON, [School of Oriental Studies]; OXFORD.

„ *Industrial*: BIRMINGHAM.

„ *Roman-Dutch*: CAMBRIDGE; OXFORD; LONDON.

„ *Russian, and Economics*: LONDON, [King's Coll., School of Economics].

„ *Scots*: The Scottish Universities.

## MEDICINE

- Cancer Research* : LONDON, [Middlesex Hospl.]; MANCHESTER. ABERDEEN.
- History of Medicine* : LONDON, [University Coll.]. EDINBURGH.
- Medical Entomology* : CAMBRIDGE.
- Medical Statistics* : LONDON, [University Coll.].
- Parasitology and Helminthology* : CAMBRIDGE; LIVERPOOL; LONDON, [School of Tropical Med.]. ABERDEEN; EDINBURGH.
- Radiology and Electrolgy* : CAMBRIDGE; LIVERPOOL.
- Tropical Medicine* : LIVERPOOL; LONDON, [Royal Army Med. Coll., School of Tropical Med.]. EDINBURGH.
- Tropical Surgery* : LONDON, [School of Tropical Med.].
- Tuberculosis* : WALES, [Univ. Coll., Cardiff]. EDINBURGH; GLASGOW.

## TECHNOLOGY

- Brewing* : BIRMINGHAM.
- Chemical Engineering* : LONDON, [University Coll., Imperial Coll.].
- Colour Chemistry, Bleaching, Dyeing* : LEEDS; MANCHESTER; Univ. Coll., Nottingham. GLASGOW, [Royal Technical Coll.].
- Economic Mineralogy* : LONDON, [Imperial Coll.].
- Electro-chemistry* : MANCHESTER.
- Electrotechnics* : MANCHESTER; LONDON, [Imperial Coll.]. BELFAST, [Municipal Coll.].
- Engineering, Automobile* : BRISTOL.
- „ *Dock and Harbour* : LIVERPOOL. TRINITY COLLEGE, DUBLIN.
- „ *Marine* : DURHAM, [Armstrong Coll.]; LIVERPOOL. GLASGOW.
- „ *Municipal and Sanitary* : LIVERPOOL; LONDON; MANCHESTER. GLASGOW.
- „ *Railway* : LIVERPOOL; LONDON, [Imperial Coll.].
- „ *Refrigeration* : LIVERPOOL.
- „ *Water Supply and Irrigation* : MANCHESTER.
- Fuel, Coal and Gas* : LEEDS; LONDON, [Imperial Coll.]; MANCHESTER, [Coll. of Technology]; SHEFFIELD; Univ. Coll., Nottingham. GLASGOW.
- Glass* : SHEFFIELD.
- Leather* : LEEDS.
- Optical Engineering and Applied Optics* : LONDON, [Imperial Coll.].
- Photography* : MANCHESTER.
- Sugar* : GLASGOW, [Royal Technical Coll.].
- Textiles* : LEEDS; MANCHESTER; Univ. Coll., Nottingham. GLASGOW, [Royal Technical Coll.]. BELFAST, [Municipal Coll.].
- Woods and Fibres* : LONDON, [Imperial Coll.].

## VACATION COURSES, 1923: PRELIMINARY ANNOUNCEMENTS

[The Board of Education publishes completer lists in April.]

BRISTOL University. (a) Aug. 3-17, Geog., Social Hist. and Polit. Sc., English Lit., Psychology, General Science. Board, lodging and tuition 55s. a week. Booking fee 2s. 6d. Secy.—W. R. Straker, 27 Morgan Street, St. Paul's, Bristol. (b) ENGINEERING COURSES: (1) March 23-28, Surveying; fee 2 gs. (2) June 25-July 21, Workshop and Drawing Office Practice; fee 3 gs.

CAMBRIDGE University Local Examns. and Lectures Syndicate. Course for Foreign students, July 30-Aug. 17.

LEEDS AND SHEFFIELD Universities Extension and Tutorial Classes Committee. Yorkshire Summer School for Tutorial Class students, Aug. and half Sept. At Saltburn-by-the-Sea. Literary and Scientific subjects. Secy.—G. H. Thompson, 21 Brudenell Rd., Leeds.

LIVERPOOL University School of Spanish, Aug. (1 month). At Santander, N. Spain. Fee £3.

LONDON. University of London Holiday Course for Foreigners, July 20-Aug. 16. At Bedford College. Fee £5. Contemporary English Drama, Modern English Novels, History of London, Sounds of Modern English. Planned especially for teachers in secondary schools. Minimum age, 18. Secy.—Univ. Extension Registrar.

University College: (1) Spoken English for Foreigners; English Phonetics, Aug. 2-15. Fee £4. (2) French Phonetics, Aug. 1-14. Fee £4. Lectures in English; practical classes conducted in French. (3) English Phonetics for English Teachers, Aug. 1-14. Fee £3. (4) Librarianship, in July. Residence and Board for men at the Hall, Ealing, £5: 10s. (2 weeks).

London School of Economics: at Dunford House, near Midhurst. (1) July 21-Aug. 4, Economics (unemployment, population, food); (2) Aug. 4-18, Geography (modern econ. and polit. problems); (3) Aug. 18-Sept. 1, History (Victorian age). The Director, Prof. Hearnshaw, and other high authorities will take part. Fee, including board residence, 55s. to 70s. a week; lectures only, 10s. a week; booking fee, £1.

OXFORD University (1) Extension Delegacy. Summer meeting, Aug. Universities, Mediæval and Modern, and their place in National Life; also Social and Economic problems of country life; (2) Delegacy for the Training of Teachers. Vacation Course in Education, August (4 weeks). Fee £7: 10s., v. p. 175.

LIVERPOOL, MANCHESTER, BELFAST, AND WALES Universities Joint Committee for Tutorial Classes. Summer School at Univ. College, Bangor. July 7-Aug. 25. Economics, Psychology, Polit. Sc., English Lit., etc. Secy.—Eli Bibby, 377 Oxford Rd., Manchester.

UNIVERSITY COLLEGE OF WALES, Aberystwyth. Summer courses in Geography (Aug. 6-25) and Music (Aug. 11-25).

ABERDEEN University. July 16-27. Fee 1 g. per week.

Information regarding vacation courses abroad will be found in Appendix XXV., under Austria, Belgium, Denmark, France (Besançon, Caen, Dijon, Grenoble, Lille, Nancy, Paris, Poitiers, Rennes, Strasbourg, Toulouse), Germany, Hungary, Italy (Florence, Perugia, Siena), Roumania, Spain, Switzerland (Fribourg, Geneva, Lausanne, Neuchâtel).

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